COLOR LASER COPIER™ 900/920/950

PARTS CATALOG

REVISION 0

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序

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キヤノン株式会社
映像事務機TS推進部
映像事務機TS推進1課

PREFACE

This Parts Catalog contains listings of parts used in the Canon COLOR LASER COPIER 900/920/950. Diagrams are provided with the listings to aid the service technician in identifying clearly, the item to be orderd.

Whenever ordering parts, consult this Parts Catalog for all of the information pertaining to each item. Be sure to include, in the Parts Request, the full item description, the item part number, and the quantity.

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処罰されることがあります。
Use of this manual should be strictly supervised to avoid disclosure of confidential information.

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パーツカタログの見方

主要部品配置図について

部品図番号（Figure No.）および各アセンブリの位置を捜すとき、主要部品配置図を用います。

図中□内は部品図名称、◯内は部品図番号を示しています。

部品番号の捜し方

どのアセンブリに使用されている部品かを、主要部品配置図で調べ、その部品番号（Figure No.）のページをめくります。

部品図の中からその部品をみつけ、そのキーNo.を部品番号リストの中から捜し出せば、部品番号・部品名称を知ることができます。

注：電源電圧・周波数等の仕様が異なる場合は、同一のキーNo.に複数の部品番号が記されているので"SERIAL NUMBER／REMARKS欄"を注意して見るようにしてください。

部品番号リストについて

部品番号リストの内容項目は次のとおりです。

(1) 部品図番号およびキーNo.
(FIGURE & KEY No.)

部品図番号は、各部品番号リスト欄の左上に示してあり、各部品図に対応しています。

また、キーNo.は、部品図中に示してある個々の部品に対応します。

(2) 部品番号（PART No.）

リストの2番目の欄には、部品番号が示してあります。

部品を発注する際は、必ずこの番号を明示してください。

NPNと記載されている部品・アセンブリには部品番号がなく、在庫もされていません。つまり供給できない部品です。

注：部品番号の末尾3桁を訂番といいます。部品改良等の目的で部品の一部が変更になった場合、訂番が変わることがあります。

これらの変更については、技術情報（Service Information）で随時連絡されますので、常にこれらの情報も注意深く読むよう心がけてください。

(3) ランク（RANK）

Nと記載されている部品はサービスパーツに設定されていますが、在庫はされていません。

注文を受けてからの受注生産になります。

(4) 使用個数（Q'TY）

4番目の使用個数欄に示してある数字は、各部品図中における各部品の使用数量を示しています。

ただし、アセンブリの使用個数は、機械1台当たりの数量を示します。

使用個数欄には数字の他に以下のアルファベット文字も表示されています。

RF……参考としてリストアップしているもの
AR……数量を限定せず、組立時に必要に応じた数量を使用するもの、および個数の明記できないもの

(5) 部品名称（DESCRIPTION）

個々の部品の名称が英文と和文で記されています。

部品発注の際、部品名称も必ず明示してください。

電気部品等の主な仕様・型番は、英文の末尾に記しているものもあります。

(6) 機体番号／備考
(SERIAL NUMBER／REMARKS)

電源電圧・周波数等の仕様の違いがある場合に、その違いを言葉あるいは機体番号の最上位桁のアルファベット（1～3文字）の略号で表示しています。

略号の表示例

・機体番号　ABC00001
└─ABCのみ表示する。

また、製品の変更により部品の互換性がない場合に、その部品の適用できる機体番号を表示しています。

これらの表示のないものについてはすべての機械に適用できます。

コネクター一覧表

製品に使用されているコネクタでサービスパーツに設定されている部品の部品番号をコネクタ番号順に示してあります。

ただし、コネクタのハウジングと端子が一体になっているものについては端子欄に部品番号を記載しておりません。

また、プリント回路基板上のコネクタについてはPCBと表示してありますのでプリント回路基板の部品リストで部品番号を捜してください。

機械標準部品一覧表

複写機全製品（オプションを含む）に共通して使われているネジ、ナット、ワッシャ、止め輪、ピン、およびスペーサのスペックを一覧表にまとめたものです。

部品索引（NUMERICAL INDEX）

部品番号の索引が巻末にあります。

部品番号がわかっていて、使用箇所を調べる場合に活用できます。

索引表の左の欄が部品番号（PART No.）、右の欄が部品図番号（FIGURE No.）とキーNo.（KEY No.）を示しています。

HOW TO USE PART LISTS

Assembly Location Diagrams. These diagrams show the locations of major assemblies of the copier. Their names are identified in rectangular boxes. Below each box is the number of the Figure which shows an exploded view of the assembly.

Finding a Parts Number. Refer to the Assembly Location Diagrams and find the Figure Number of the assembly of interest. Turn to the page(s), locate the part on the exploded view, and find its Key Number. Refer to the Parts List on the page facing the exploded view and find the Key Number, Part Number and quantity required for your type of machine.

Note : While looking for a Part Number, pay particular attention to the voltage listed in the SERIAL NUMBER/REMARKS column to ensure that the Part Number selected is for your type of machine. Immediate shipping or action regarding the part depends on using its correct Part Number.

Parts List pages. The Parts List pages contain the following columns and information.

(1) Figure and Key Number column. The first column shows the Figure Number of the illustration corresponding to the Parts List, and the Key Number that identifies the part on the illustration.

(2) Part Number. The second column shows the Part Number for the part. This Number must be used when ordering replacement parts or assemblies described in the description column do not have a Part Number and are not stocked.

Note : The last three digits (suffix) of the Parts Number are called the Revision Number. The Revision Number is changed if the part is modified. Information regarding such changes will be provided by Service Information Bulletins. These Bulletins should be read carefully.

(3) Rank N. Parts marked "N" are service parts, but are not stock items. They are produced on a special-order basis.

(4) Quantity column. The quantity shown in this column is the number of parts used in the Figure. However, the quantity listed for an assembly indicates the number of that assembly per machine.

The letters in this column indicate that the quantity of a part is not specified, allowing the use of the number of parts needed for assembly and that the quantity cannot be mentioned clearly.

RF... listed for reference only.
AR... quantity not specified or cannot be specified; used in quantities as necessary at time of assembly.

(5) Description column. The Description col-umn lists the description that should be used when ordering the part.

(6) Serial Number/Remarks. When there are differences in the specifications of power

supply voltage, frequency, etc., the differences are described in words or indicated by one, two or three letters in front of the serial number.

(Example)

Serial number ABC00001

These are the descriptive indicator.

If a modified model and a part are no longer interchangeable, the serial number of copiers for which the part can be used is shown in this column. If there is no indication the part can be used with all models.

Connectors list. Part numbers of connectors used in copiers and designated as Service Parts are listed in numerical order by connector number.

For connectors of which the housing and contacts are a single unit, there are no part numbers for the contact.

Connectors that are mounted on PCBs are indicated as "PCB" in the connector column. The part numbers for these connectors should be looked for in the PCB parts list.

List of Standard Fasteners. This specificationslist incorporates screws, nuts, washers and shim washers, retaining rings, pins, and spacers that are used in all copiers (including optional equipment).

Numerical Index. There is a Numerical Index at the end of this catalog; it lists in numerical order every Part Number contained in the Parts Lists. The Numerical Index contains the following columns and information.

(1) Part Number. The first column shows the Part Number.

(2) Figure and Key Number column. The second column lists the Figure and Key Number for each occurrence of the part in the illustrations.

UTILISATION DU CATALOGUE DES PIÈCES DÉTACHIÉES

Schémas de localisation des ensembles. Ces schémas indiquent l'emplacement des principaux ensembles du copieur. La designation correspondant à chaque ensemble est spécifiée dans un encadré. Le numéro de la figure repiésentant la vue éclatée de l'ensemble est fourni sous l'encadré.

Recherche d'un numéro de référence. Consulter les schémas de localisation pour trouver le numéro de figure correspondant à l'ensemble concerné. Se reporter aux pages indiquées; identifier la pièce sur la vue éclatée, et voir le numéro de repère qui lui a été attribuée. Rechercher ce numéro de repère dans la première colonne des pages de listes de pièces situées juste après la vue éclatée.
Une fois le numéro de repère trouvé, le tableau précise dans l'ordre, le numéro de référence, le nombre de pièces identiques, la désignation, la catégorie et, éventuellement, les numéros de série des machines équipées de cette pièce.

Remarque : Lors de la recherche d'un numéro de référence, bien vérifier que la tension d'alimentation indiquée dans la colonne numéros de série et remarques correspond au type de la machine à dépanner. Une expédition rapide, ou tout autre action relative à une pièce, ne peut être assurée que si l'on utilise le numéro de référence correct.

Pages de listes de pièces détachées. Dans ces pages, les informations suivantes sont fournies, sous forme de tableaux.

(1) Colonne numéros de figure et de repère. Dans cette première colonne, le premier chiffre correspond au numéro de figure de la vue éclatée, et le second au numéro de repère de la pièces sur cette vue.

(2) Colonne numéro de référence. Cette seconde colonne indique le numéro de référence de la pièce. Ce numéro doit être utilisé en particulier pour les commandes de pièces. La mention "NPN" dans cette colonne signifie que la pièce ou l'ensemble, dont la désignation est fournie sur la même ligne, n'a pas de numéro de référence et n'est pas conservée en stock.

(3) Colonne catégorie N. La mention "N" signifie qu'il s'agit bien d'une pièce de maintenance, mais qu'elle n'est pas conservée en stock, et qu'elle doit faire l'objet d'une commande spéciale.

(4) Colonne quantité. Le chiffre indiqué dans cette colonne correspond au mombre de pièces identiques figurant sur la vue éclatée. Cependant, s'il s'agit d'un ensemble, le chiffre indique le nombre d'ensembles identiques utilisés dans la machine.

La présence de lettre dans cette colonne signifie que le nombre de pièces ne peut pas être précisé, car il dépend des besoins du montage.

RF...pièce énumérée pour référence uniquement.

AR...quantité non spécifiée ou ne pouvant être spécifiée; type de pièce dont la quantité utilisée sur le terrain est variable (par ex., fil corona).

(5) Colonne désignation. Cette colonne fournit la désignation qui doit être utilisée en particulier dans les commandes de pièces.

(6) Colonne numéros de série et remarques. Si une pièce ne peut être utilisée que sur une machine présentant une tension d'alimentation ou une fréquence bien particulière, ces précisions sont fournies en détail ou sous forme d'un code de trois lettres situé avant les numéros de série.

(Exemple)
Numéro de série ABC00001
└─ Code indicateur de restriction d'emploi.

Lorsqu'un modère a été modifié, et qu'une pièce n'est plus entièrement interchangeable, cette même colonne indique les numéros de série des machines sur lesquelles la pièce désignée peut être utilisée. Si aucun numéro de série ne figure dans la colonne, la pièce peut être utilisée sur toutes les machines, indépendamment des modifications qu'elles ont pu subir.

Liste des connecteurs. Les numéros de référence des connecteurs utilisés dans le copieur et faisant partie des pièces de maintenance, sont énumérés dans l'ordre de leurs numéros sur les schémas électriques.

Pour ce qui concerne les connecteurs uniquement livrés avec les cosses incorporées au boîtier, il n'existe pas de numéros de référence pour les cosses.

Lorsque des connecteurs sont montés sur des cartes de circuit imprimé, on trouve la mention "PCB" dans la colonne connecteurs. Les numéros de référence de ces connecteurs doivent être recherchés dans la liste des cartes de circuit.

Liste des articles courants de visserie/boulonnerie. La "List of Standard Fasteners" regroupe tous les numéros de repère correspondant aux vis, écrous, rondelles, circlips, goupilles et cales d'épaisseur utilisés dans tous les copieurs et accessoires en option. Les numéros de repère de ces pièces se distinguent des autres du fait qu'ils sont constitués d'une lettre suivie de deux chiffres. Ces articles de visserie/boulonnerie ne sont pas repris dans les listes de pièces à la suite des vues éclatées.

La liste de ces articles présente des suffixe de révision différents de ceux mentionnés dans les catalogues de pièces détachées publiés pour chaque modèle. Les pièces rajoutées par rapport à l'édition précédente sont indiquées par un "*" à gauche du numéro de repère.

Index des numéros de référence. On trouve à la fin du catalogue des pièces détachées un index qui reprend dans l'ordre tous les numéros de référence mentionnés dans les listes de pièces. L'index des numéros de référence comporte deux colonnes.

(1) Colonne numéro de référence. Le numéro de référence est inscrit dans cette première colonne.

(2) Colonne numéros de figure et de repère. Cette seconde colonne indique le numéro de la figure et le numéro de repère correspondant à chacune des vues éclatées sur lesquelles la pièces est repésentée.

COMO UTILIZAR LAS LISTAS DE PIEZAS

Diagramas de las Unidades. Estos diagramas, muestran la ubicación de las principales unidades de la copiadora. Sus nombres aparecen identificados en cuadros rectangulates. Debajo de cada cuadro, se encuentra el número de la figura ilustrando una vista desarrollada de la unidad.

Cómo encontrar un Número de Pieza. Refiérase a los Diagramas de Ubicación de las Unidades, y encuentre el número de la figura de la unidad que le interesa. Vaya a la página(s) indicada(s), ubique a la pieza en la vista desarrollada y halle su Número Clave. Refiérase a la Lista de Piezas en la página adyacente a la vista y busque el Número Clave, el número de la pieza y la cantidad requerida para su tipo de maquina.

Nota : Al buscar un Número de Pieza, ponga especial atención al voltaje que aparece listado en la columna de NUMERO DE SERIE/OBSERVACIONES, para asegurarse que el Número de Pieza seleccionado es para su tipo de máquina. El embarque inmediato, así como cualquier medida sobre el repuesto, depende del correcto uso que se haga del Número de la Pieza.

Páginas de la Lista de Piezas. Las páginas de la Lista de Piezas, contienen las siguientes columnas e informaciones.

(1) Columna de Figura y del Número de Clave. En la primera columna, se muestra el número de la figura de la ilustración correspondiente a la Lista de Piezas, así como el Número Clave que identifica a la pieza sobre la ilustración.

(2) Número de Pieza. La segunda columna, expone el Número de Pieza para el repuesto. Este es el número que debe usar al ordenar sus piezas de repuesto. Las letras NPN en esta columna, indican que las piezas o unidades descritas en la columna de descripciones no tienen un Número de Pieza, y por lo tanto, no están almacenadas en la bodega.

Nota : Los tres últimos dígitos (sufijo) del Número de Pieza, se denomina el Número de Revisión. El Número de Revisión, se cambia al modificarse la pieza. La información relacionada con tales cambios se notificará por medio de los Boletines de las Informaciones de Servicio. Estos boletines, deben leerse cuidadosamente.

(3) Tipo N. Las piezas marcadas "N", son piezas de repuesto, pero no son ítemes de existencia en las bodegas.
Estas se producen en base a ordenes especiales.

(4) Columna de Cantidades. La cantidad expuesta en esta columna correspondiente a la cantidad de piezas usadas en la figura. No obstante, la cantidad listada para una unidad indica la cantidad de ésa unidad por máquina.

En esta columna, las letras indican que la cantidad de una pieza especifica no está especificada, permitiendo el uso de la cantidad de piezas necesarias para ensamblar y que la cantidad no se puede mencionar claramente.

RF...sólo listado por referencias.
AR...cantided no especificada o que no puede ser especificada; utilice la cantidad nece

saria en el momento del montaje.

(5) Columna de Descripción. La Columna de Descripción, lista la descripción que debe utilizarse al ordenarse la pieza.

(6) Número de Serie/Observaciones. Cuando hay diferencias en las especificaciones sobre el voltaje de suministro, la frecuencia, etc., la diferencia se describe en palabras o se indica por una o dos letras enfrente del número de serie.

(Por ejemplo)

Número de Serie ABC00001

Estos son el indicador descriptivo.

Si ya un modelo modificado y una pieza no son intercambiables, el número de serie de las copiadoras en las que se puede usar la pieza se ilustra en esta columna. Si no hay indicación alguna, la pieza se puede usar con todos los modelos.

Lista de Conectores. Los números de repuesto de los conectores usados en las copiadoras y que se han designado como Repuestos de Servicio, aparecen listados en orden numérico por el número del conector.

Para los conectores cuyos alojamientos y contactos son una sola unidad, no hay número de pieza para el contacto.

Los conectores que están montados en los Circuitos Impresos "PCB's", se indican como "PCB" en la columna del conector. Los números de pieza para estos conectores deben buscarse en la lista de piezas de los PCB.

Lista de los Sujetadores Estándar. Esta lista, incorpora los tornillos, tuercas, arandelas y las arandelas separadoras, aros retenedores, (do los equipos opcionales.) Estas piezas tienen diferentes números Clave á aquellos números clave que aparecen en cada ilustración.

Indice Numérico. Al final de este Catálogo, hay un Indice Numérico: tiene ubicado por orden numérico cada Número de Pieza contenido en la Lista de Repuestos. El Indice Numérico, contiene las siguientes columnas e informaciones.

(1) Número de Pieza. La primera columna indica el Número del Repuesto.

(2) Columna de la Figura y Número Clave. La segunda columna lista la figura y el número clave para cada incidencia de la pieza en las ilustraciones.

GEBRAUCH DER TEILELISTE

Schaubilder der Einbauorte. Die Einbauorte der Hauptbaugruppen des Kopiergerätes werden hier in Schaubildern gezeigt. Die Bezeichnungen der Baugruppen befinden sich in rechteckigen Kästchen. Darunter steht die Abbildungsnummer, unter welcher eine Explosionsdarstellung der betreffenden Baugruppe im Katalog gezeigt wird.

Auffinden der Teilenummer. Zunächst sucht manbei den "Schaubildern der Einbauorte" – die Abbildungsnummer. Dann schlägt man die der Abbildungsnummer entsprechende Seite des Kataloges auf und sucht die Schlüsselnummer des gewünschten Teiles in der Explosionsdarstellung. Anhand der Schlüsselnummer des gewünschten Teiles in der Explosionsdarstellung läßt sich nun die Teilenummer und die Anzahl der Teile entsprechend des Gerätetypes ermitteln.

Hinweis : Auf der Suche nach einer Teilenummer besonders auf die Spalte achten, in der die Seriennummer des Kopiergerätes aufgeführt ist, um sicherzustellen, daß die gewählte Teilenummer zur Betriebsspannung des Gerätetyps paßt.

Seiten der Teileliste. Die Seiten der Teileliste sind folgendermaßen gegliedert :

(1) Abbildungs-und Schlüsselnummer. In der ersten Spalte einer Seite steht die Abbildungsnummer der Darstellung sowie die Schlüsselnummer, mit der das Teil in der Explosionsdarstellung gekennzeichnet ist.

(2) Teilenummer. In der zweiten Spalte steht die Teilenummer des entsprechenden Teils. Diese Nummer muß bei der Bestellung von Ersatzteilen verwendet werden. Die Buchstaben NPN in dieser Spalte weisen darauf hin, daß das Teil bzw. Die Baugruppe keine Teilenummer hat und nicht lieferbar ist.

Hinweis : Die letzten drei Stellen einer Teilenummer geben die Revisionsnummer an. Die Revisionsnummer wird im allgemeinen bei der Modifizierung eines Teils geändert. Kenntnis darüber erhalten Sie in Form einer "Technischen Information". Diese Informationen sollten sorgfältig gelesen werden.

(3) Rang N. Teile mit der Kennzeichnung N sind Serviceteile, jedoch keine Lagerartikel. Sie werden im Falle einer Bestellung eigens hergestellt.

(4) Teilemenge. In dieser Spalte ist die Anzahl der in der dargestellten Baugruppe verwendeten Teile angegeben. Die für Baugruppen angegebene Anzahl bezieht sich auf die Anzahl von Baugruppen pro Gerät.

Buchstaben in der Spalte weisen darauf hin, daß das Teil kein eigenständiges Teil der Baugruppe ist und nur zur Bezugnahme aufgeführt ist.

RF...nur zur Bezugsnahme angeführt
AR...die genaue Anzahl kann nicht individuell angeführt werden; bestellen Sie daher je nach Erfordernis.

(5) Teilebezeichnung. Hier wird die Bezeich

nung des Teils angegeben, die bei der Bestellung verwendet werden sollte.

(6) Seriennummer/Bemerkungen. Unterschiedliche Gerätespezifikationen (Netzspannung, Netzfrequenz usw.) sind anhand der Buchstaben der Seriennummer zu erkennen, oder werden in Textform beschrieben.

Beispiel : Seriennummer $\underline{\text{ABC}}000001$

$\uparrow$

Kennzeichnung der Gerätespezifikation

Wird ein Gerät geändert und ein Teil ist nicht mehr austauschbar, werden die Seriennummern der Geräte, für welches das jeweilige Teil verwendet werden kann, ebenfalls in dieser Spalte aufgeführt.

Ein Teil ist in allen Geräten eines Modells verwendbar, wenn keine Eintragung in dieser Spalte vorhanden ist.

Liste der Steckverbindungen. Die Teilenummern der Steckverbindungen sind in dieser Liste in numerischer Reihenfolge aufgeführt.

Bei Steckern, die, aus, getrennten, Steckergehäusen und Steckerkontakten, bestehen, wird keine Teilenummer für die Steckerkontakte angegeben. Steckverbindungen, die sich auf Printplatten befinden, sind durch die Buchstaben "PCB" gekennzeichnet. Die Teilenummer dieser Steckverbindungen ist bei den entsprechenden Printplatten zu finden.

Liste der Standard-Befestigungselemente. In dieser Liste sind Schrauben, Muttern, Unterlegscheiben, Sprengringe, Stifte usw., die bei allen Geräten (incl. Sonderzubehör) zur Anwendung kommen, aufgeführt.

Numerischer Index. Im Anhang dieses Katalogs sind in numerischer Reihenfolge alle in den Teilelisten enthaltenen Teilenummern aufgeführt. Der numerische Index ist folgendermaßen aufgebaut.

(1) Teilenummer. In der ersten Spalte des Index stehen die Teilenummern.

(2) Abbildungs und Schlüsselnummer. In der zweiten Spalte des Index sind die Abbildungs und Schlüsselnummern für alle in den Darstellungen erscheinenden Teile aufgelistet.

ПОРЯДОК ПОЛЬЗОВАНИЯ СПИСКАМИ ДЕТАЛЕЙ

Схемы расположения узлов (Assembly Location Diagrams) На этих схемах показано расположение основных узлов копировального аппарата. Их наименования приведены в прямоугольных рамках. Ниже каждой прямоугольной рамки приведен номер рисунка, на котором показано изображение соответствующего узла в разобранном виде.

Нахождение номера детали (Part Number)

Ссылаясь на схемы расположения узлов, отыскать номер рисунка требуемого узла. Перевернуть страницу(ы), найти требуемую деталь на изображении узла в разобранном виде и найти ключевой номер детали. Ссылаясь на список деталей, приведенный на странице, на которой имеется изображение узла в разобранном виде, найти ключевой номер, номер детали и количество деталей, требуемых для машины Вашей модели.

Примечание: Во время поиска требуемого номера детали следует уделять особое внимание напряжению, указанному в колонке СЕРИЙНЫЙ НОМЕР/ЗАМЕЧАНИЯ (SERIAL NUMBER/REMARKS), чтобы убедиться в том, что выбранный номер детали подходит для машины вашей модели.
Скорость поиска и отгрузки детали в значительной степени зависит от указания правиьного номера детали.

Страницы списка деталей (Parts List pages)

Страницы списка деталей содержат следующие колонки и информацию:

(1) **Колонка номеров рисуика и ключевых номеров (Figure and Key Number column)** В первой колонке приведен номер рисунка на иллюстрации, соответствующей, данному списку деталей, и ключевой номер, который позволяет идентифицировать требуемую деталь на этой иллюстрации.

(2) **Номер детали (Part Number)** Во второй колонке приведены иомера деталей. Этот номер следует указывать при заказе заменяемой детали. Буквы NPN в этой колонке указывают на то, что детали или узлы, описанные в колонке описания, не имеют номера детали и не хранятся на складе.

Примечание: Последние три цифры (суффикс) номера детали называются ревизионным номером. Ревизионный номер изменяется в случае модчфицирования детали. Информация о таких изменениях содержится в наших "Бюллетенях технического обслуживания". Поэтому следует внимательно читать эти бюллетени.

(3) Ранг N (Rank N) Части со знаком "N" — сервисные и не находятся в хранении. Они изготавливаются по специальным заказам.

(4) **Колонка количества (Quantity column)**

Количество, указанное в этой колонке, является числом деталей, используемых на данном рисунке. Однако, количество, указанное для случая узла, означает число таких узлов в одном аппарате.

Буквы в этой колонке означают, что количество таких деталей не специфицируется, что позволяет использовать номера деталей, требуемых для сборки, в то время как количество невозможно то чно указать.

RF... приводится только как справочное значение.

AR... количество не специфицировано или не может быть специфицировано; используются в необходимых количествах при сборке.

(5) Колонка описания (Description column) В этой колонке приведено описание детали, которое следует указывать при заказе детали.

(6) Серийный номер / замечания (Serial Number/Remarks) Когда имеются отличия в таких технических характеристиках, как напряжение, частота и т.д. источника питания, эти отличия описываются или обозначаются одной или тремя бувами стоящими перед серийным номером.

Пример : Серийный номер ABC 00001
↑
Это указателч
описания.

Если модель модифицирована, и деталь больше не подлежит замене, то соответствующий серийный номер копировальных аппратов, для которых может использоваться деталь, указывается в этой колонк. Если нет такого указания, то данная деталь может использоваться для всех моделей.

Список разьемов (Connectors List) номера деталей для разьемов, используемых в копировальных аппаратах, обозначаются как сервисные номера и перечисляются в числовом порядке по номерам разьемов.
Для разьемов, для которых корпус и контакты составляют одно целое, номера деталей для контактов не указываются.
Разьемы смонтированы на печатных платах и обозначаются как „PCB" в колонке разьемов. Номер детали для таких разьемов следует искать в списке деталей для печатных плат (PCB).

Список стандартных крепежных деталей (List of Standard Fasteners) В этом спечцфцкачцй списке содержатся винты гайки, шайбы и прокладочные (регулировочные) шайбы, стопорные кольца, пальцы и распорные втулки, которые используются во всех копировальных аппаратах (включая и оборудовние, поставляемое по специальному заказу).

Числовой индекс (Numerical Index) Это числовой индекс, который стоит в конце данного каталога; индексы перечислены в числовом порядке для каждого номера детали, содержащегося в списке деталей.

Числовые индексы содержат следующие колонки и информацию :

(1) Номер детали (Part Number) В первой колонке приведен номер детали.

(2) Колонка номеров рисунков и ключевых номеров (Figure and Key Number column) Во второй колонке приведены номера рисунков и ключевые номера для каждой детали, приведенной на иллюстрациях.

零件目录的使用方法

1. 主要零件布置图

从主要零件布置图中，可以查找零件图编号及各个组件的位置。

图中□内标以零件图名称，◯内标以零件图编号。

2. 零件编号的查找方法

各个组件使用的零件，可以在主要零件布置图中查找，掀到零件图编号页。

从零件图中查找零件，只要先从零件编号表中找到基本编号后，则零件编号及零件名称即可得出。

注：电源电压，频率等规格不同时，则在同一基本编号处，记有多种零件编号，故请注意序列号及备考栏。

3. 零件编号表

零件编号表的内容项目如下：

（1）零件图编号及基本编号

在各种零件编号表栏的左上方，标明零件图编号，与各个零件图相对应。

另外，基本编号与零件图中的各个零件是互相对应的。

（2）零件编号

表中第2栏，为零件编号。

订购零件时，务请注明零件编号。

标有NPN的零件及组件，没有零件编号，也没有库存，即不能供应的零件。

注：零件编号的3位尾号，称为订正号，为了改进零件进行部分变更时，则变更此尾号。变更状况，于技术情报上随时报导，因此请随时留意阅读该情报。

（3）类　别

标有N的零件为修理用零件，没有库存，接受订货后，可进行定作。

（4）使用个数

第4栏（即使用个数栏）中的数字，为各零件图中该零件的使用数量。组件的使用个数，为每部机械的使用数量。

使用个数栏，除数字外，还标以下列的有关字母。

RF……为参考数量

AR……表示不限定数量，安装时根据需要，确定使用数量；或者不易确定的个数。

（5）零件名称

每种零件的名称均分别以英文与日文表示。订购零件时，务请注明具体名称。电气零件等的主要规格，型号，均于英文的末尾标明。

（6）机械整体的编号／备考

电源的电压与频率等，规格如果不同时，以文字加以说明，或以机械本身编号最前面的字母（从前面数第1个到第3个字母）的略号表示。

略号的表示示例：

机械整体番号　　ABC00001

↑ 只以ABC表示

另外，由于产品变更，零件不能互换时，则将表示该零件能够适用的机体编号。

如果没有任何表示时，则将适用于所有机型。

4. 连接器一览表

产品使用的连接器上的零件之编号，按照连接器编号顺序表示。

连接器罩与接头为一整体结构时，则接头栏内不再注明零件编号。

另外，印刷电路板上的连接器，标以PCB符号，请在印刷电路板的零件表上查找零件编号。

5. 机械的标准零件一览表

整个复印机全部产品（包括选购件）所共同使用的螺

钉，螺母，衬垫，挡圈，销及调整垫等的规格，均汇总于标准零件一览表内。

6. 零件索引

卷末附有按零件的编号顺序的索引。

了解零件编号后，查找使用位置时，极为方便。

索引表中的左栏为零件编号，右栏为零件图编号与基本编号。

كيف تستخدم قائمة قطع الغيار

الرسومات التوضحية لأماكن المجموعات

توضح هذه الرسومات اماكن كافة مجموعات الالة وقد كتب اسم كل مجموعة داخل مستطيل وكتب اسفل كل مستطيل رقم الصفحة التي تحتوى على الرسم التفصيلى الذى يوضح جميع اجزاء المجموعة.

ايجاد رقم جزء ما

ارجع الى الرسومات التوضحية لأماكن المجموعات وابحث عن رقم الصفحة الخاص. بالمجموعة التي تحتوى على الجزء المطلوب انتقل الى تلك الصفحة، وحدد الجزء على الرسم التفصيلى وتبين الرقم الذى يمثل هذا الجزء وابحث في قائمة الأجزاء الواقعة في الصفحة المقابلة للرسم التفصيلى عن الرقم الذى يمثل الجزء المطلوب وتبتن رقم الجزء والكمية المستخدمة منة في طراز آلتك.

ملاحظة: عند البحث عن رقم جزء ما، انتبه الى الجهد الكهربي الذي يناسبه والموضح في عمود الرقم المسلسل للالة/الملاحظات للتاكد ان الرقم الذى حصلت علية هو المناسب لطراز آلتك - لأن الرقم الصحيح للجزء يساعد على حصولك عليه باقصى سرعة.

الصفحات الخاصة بقوائم الأجزاء

وهي تتكون من الأعمدة والمعلومات الآتية:

(١) عمود رقم الصفحة والرقم الذى يمثل الجزء

يوضح العمود الأول رقم الصفحة الخاصة بالرسم التفصيلي المرفق بقائمة الأجزاء كما انه يوضح الرقم الذى يمثل الجزء على الرسم.

(٢) عمود رقم الجزء

يبين العمود الثاني رقم الجزء وهو الذى يجب ان يستخدم عند طلب قطع الغيار، عندما يتم طلب اجزاء مذكورة مواصفاتها ولم يتم ذكر رقم الجزء وليس لها مخزون.

ملاحظة: الأرقام الثلاثة الأخيرة من رقم الجزء تسمى ارقام المراجعة وهى تتغير اذا حدث تعديل للجزء. وترد المعلومات والتفاصيل الخاصة بهذا التعديل في نشرة تعليمات الصيانة والتى يرجى ان تقرأ بعناية.

(٣) عمود الرتبة N

الأجزاء المشار اليها بحرف N هى اجزاء مستخدمة ولكنها ليست مخزونة وتنتج هذة الأجزاء بناء على طلب خاص.

(٤) عمود الكمية

يشيرالعدد المدون في هذا العمود الى الكمية من نفس الجزء المستخدمة في الرسم. بينما الكمية المدونة لمجموعة ما تبين عدد مرات استخدام المجموعة في الالة.

عند وجود احرف في هذا العمود فهذا يعني ان عدد مرات استخدام هذا الجزء غير محدد وانة يسمح باستخدام العدد المطلوب للتجميع.

RF ....معطاة كمرجع فقط.

AR ......الكمية غيرة محددة او لا يمكن تحديدها، وتستعمل حسب الكميات الضرورية عند التجميع .

(٥) عمود وصف الجزء

يوضح هذا العمود الوصف الذى يجب استخدامة عند طلب الجزء .

(٦) عمود الرقم المسلسل للالة/الملاحظات

عند وجود اختلافات في مواصفات جزء معين نتيجة لأختلاف الجهد الكهربي المستخدم او التردد...الخ ،فان هذة الأختلافات توصف اما بالكلمات واما بالحرف الأول او الثلاثة احرف الأولى من الرقم المسلسل للآلة.

(مثال):

الرقم المسلسل ABC000001

هذة الحروف تشير الى اختلاف المواصفات

اذا حدث تعديل بالآلة واصبح جزء ما غير مناسب للآلات المعدلة فانة يكتب في هذا العمود الرقم المسلسل للآلات حيث يمكن استخدام الجزء. واذا لم ترد تعليمات بذلك فانة يمكن استخدام هذا الجزء في جميع الآلات.

قائمة الموصلات

ارقام الموصلات المستخدمة في آلات النسخ والتي تعتبر قطع تبديل دونت في هذه القائمة بترتيب رقمي .

بالنسبة للموصلات التي تشمل نقطة التوصيل فلم تعطي رقم قطعة.

اما بالنسبة للموصلات المركبة على اللوحات الكهربائية، فقد كتب في عمود نوع الوصلة "PCB" ويمكن الحصول على رقم الوصلة بالرجوع الى قائمة اللوحات الكهربائية.

قائمة القطع القياسية للاحكام والربط

تشمل هذه قائمة المواصفات المسامير القلاووظ، الصواميل، الورد، الحلقات الحاجزة، البنوز والقطع الفاصلة التي تستخدم في كافة آلات النسخ (بما في ذلك الاجزاء الاختيارية).

فهرس ارقام االاجزاء

هناك فهرس لأرقام الاجزاء في نهاية الكتالوج مدون بالترتيب التصاعدي لكل جزء مذكور في قوائم الاجزاء ويتضمن الاعمدة والمعلومات الاتية:

(١) رقم الجزء

موضح في العمود الاول.

(٢) الصفحة والرقم الذي يمثل الجزء على الرسم

يشمل العمود الثاني رقم الصفحة والرقم الذي يمثل الجزء اينما ظهر في الرسومات التفصيلية.

ارقام الاجزاء المدونة في قائمة القطع القياسية للاحكام والربط غير مذكورة في هذا الفهرس

PARTS CATALOGUE 보는법

主要部品配置図에 관하여

部品図番号(Figure No) 및 각 Assembly의 위치를 찾을 때 주요부품 배치도를 이용합니다.

배치도의 □ 내는 부품도 명칭, ⬭ 내는 부품도 번호를 나타낸다.

部品番号 찾는 方法

어느 Assembly에 사용되고 있는 部品인가 주요 부품 배치도에서 찾아내어, 그 부품도번호(Figure No)의 Page를 폅니다. 부품도에서 그 부품을 찾아 2Key No를 부품번호 List 안에서 찾아내면 부품번호, 부품명칭을 알 수가 있습니다.

주 : 전원전압, 주파수등의 사양이 다른 경우는 동일 Key No에 복수의 부품번호가 기록되어 있기 때문에 "Serial Number/Remarks" 난을 주의하여 보도록하십시오.

部品番号 List에 관하여

部品番号 List의 항목별 내용은 다음과 같습니다.

(1) 부품도번호 및 Key No (Figure & Key No)

부품도번호는 각 부품번호 List 난의 좌 상단에 표시 하였으며, 각 부품도에 대응하고 있습니다.

또 Key No는 부품도에 표시하는 각각의 부품에 대응하고 있습니다.

(2) 部品番号(Part No)

List의 두번째 난에는 부품번호가 표시되어 있습니다.

부품을 발주할 때 반드시2번호를 명시하여주십시오.

NPN이라고 기재되어있는 部品· Assembly에는 部品番号가 없으며 재고도 없다.

다시말해 공급되지 않는 부품입니다.

주 : 부품번호의 마지막 3자리를 訂定番号라고 합니다. 부품개량등의 목적으로 部品의 일부가 변경된 경우 정정 번호가 변하게 되는수가 있습니다.

이들의 변경에 대해서는 기술정보(Service Information)로 수시 연락하고 있으므로, 항상 기술정보를 주의깊게 읽도록 하여주십시오.

(3) RANK

N이라고 기재되고 있는 部品은 서비스파쓰에 설정되어 있지만 재고는 되어 있지 않습니다.

주문을 받아서 수주 생산을 하고 있습니다.

(4) 사용수량(QTY)

네번째의 사용수량 난에 표시되어 있는 숫자는 각 부품도에 있어서 각 부품의 사용수량을 표시하고 있습니다.

단, Assembly의 사용수량은 기계 한대당의 수량을 표시합니다. 사용수량 난에는 숫자외에 알파벳문자로도 표시되어 있습니다.

RF : 참고로서 List UP하고 있는 것.

AR : 수량이 한정되어 있지 않고 조립시 필요에 따라 사용하는것. 사용수량을 확실히 할수 없는것.

(5) 부품명칭(Description)

부품의 명칭이 영문과 일본어로 기재되어 있습니다. 부품을 발주할 때는 부품명칭을 반드시 명시하여야 합니다. 전기부품등의 중요한사양, 型番은 영문의 마지막에 표기되어 있는것도 있습니다.

(6) 機械番号/備考(Serial Number/Remarks)

전원전압 주파수등 사양의 차이가 있는 경우에는 그차이를 단어 혹은 기체 번호의 첫째짜리 알파벳(1~3文字)의 약호로서 표시하고 있습니다.

예) 機体番号 ABC00001
└ABC만 표시

또, 제품변경에 따라 부품의 호환성이 없을 경우에는 그 부품의 적용되는 기체번호를 표시하고 있습니다. 이러한 표시가 없는것에 대해서는 모든 기계에 적용 됩니다.

Connector 일람표

제품에 사용하고 있는 Connector는 Parts List에 설정되고 있는 부품의 부품번호를 Connector번호 순으로 나타내고 있습니다.

단 Connector의 Housing과 단자가 하나로 되어 있는 것은 단자 난에 부품번호를 기입하고 있지않다. 또 Print회로 기판상의 Connector에 대해서는 PCB로 표시하고 있으므로 Print회로 기판의 부품 List에서 부품 번호를 찾으십시오.

機械標準部品一覧表

복사기 전제품(Option 포함)에 공통으로 사용되고 있는 Screw Nut, Washer, 고정 Ring, Pin 및 Spacer의 Spec를 일람표에 정리한 것입니다.

部品索引(Numerical Index)

부품번호의 색인은 권말에 있습니다.

부품번호를 알고 사용개소를 찾을 경우에 활용합니다.

색인표의 좌측란이 부품번호(Part No) 우측란이 부품도 번호와 Key No을 나타내고 있습니다.

COLOR LASER COPIER™ 900/920/950

LIST OF SERIAL NUMBER
シリアルナンバー一覧表

COLOR LASER COPIER 900

100V	50/60Hz	F13-6511	LJL00001 -
115V	60Hz	F13-6501	NJB00001 -
120V	60Hz	F13-6531	NJC00001 -
220V	50Hz	F13-6521	PFE00001 -
220V	50Hz	F13-6512	PFW00001 -
220V	50Hz	F13-6541	PFG00001 -
220V	50Hz	F13-6571	SBB00001 -
220V	50Hz	F13-6581	TBC00001 -
220V	50Hz	F13-6591	UDK00001 -
240V	50Hz	F13-6551	QBX00001 -
240V	50Hz	F13-6561	RCB00001 -

COLOR LASER COPIER 920

100V	50/60Hz	F13-6513	LJN00001 -
220V	50Hz	F13-6522	PFX00001 -
220V	50Hz	F13-6573	SBC00001 -
220V	50Hz	F13-6583	TBD00001 -
220V	50Hz	F13-6593	UDL00001 -
240V	50Hz	F13-6553	QBY00001 -
240V	50Hz	F13-6563	RCC00001 -

COLOR LASER COPIER 950

100V	50/60Hz	F13-6514	LJP00001 -
120V	60Hz	F13-6534	NJD00001 -
220V	50Hz	F13-6532	PFZ00001 -
220V	50Hz	F13-6544	PFT00001 -
220V	50Hz	F13-6574	SBD00001 -
220V	50Hz	F13-6584	TBE00001 -
220V	50Hz	F13-6594	UDM00001 -
240V	50Hz	F13-6554	QBZ00001 -
240V	50Hz	F13-6564	RCD00001 -

目　次

A.　主要部品配置図

001.　消耗品／取付金具
020.　特殊工具

100.　外装カバー
101.　本体前側板（1）
102.　本体前側板（2）
103.　本体機械内部（1）
104.　本体機械内部（2）
105.　本体機械内部（3）
106.　本体機械内部（4）
107.　本体後側板（1）
108.　本体後側板（2）
109.　本体底板
110.　電源コード台部（100／115／120V）
111.　電源コード台部（220／240V）
120.　給紙ドア部
130.　操作部
160.　原稿台カバー部
180.　カウンタ部

240.　転写クリーナ駆動部
250.　メインモータ部
251.　給紙モータ部
252.　現像駆動部
253.　定着モータ部
255.　ドラムモータ部
260.　レジスト搬送駆動部
261.　両面中継駆動部（CLC950）
265.　両面駆動部（CLC950）
270.　現像加圧部
275.　転写カム部
290.　廃トナー駆動部

300.　カセット（大）
305.　カセット（小）
306.　カセットヒータ（大 CLC920／950用）
307.　カセットヒータ（小 CLC900／920用）
310.　手差し部
311.　マルチ手差しトレイ部
312.　上段給紙部
313.　中段給紙部（CLC900）
313A.　中段給紙部（CLC920）
314.　下段給紙部（CLC920／950）
315.　再給紙部（CLC950）
316.　反転部（CLC950）
320.　レジスト前ガイド部
351.　レジスト前搬送部
365.　中間トレイ部（CLC950）
370.　排紙部
375.　内排紙部

420.　第1ミラー台部
430.　リーダ部

500.　感光ドラム部
530.　転写ドラム部
532.　分離爪部
535.　転写枠部
536.　吸着ローラ部
550.　1次帯電器
580.　分離帯電器
585.　内除帯電器
590.　外除帯電器

620.　ホッパ台部
621.　ホッパ部（BK／M／C）
622.　ホッパ部（Y）
640.　現像器（M／C／Y）
642.　現像器（BK）

710.　転写クリーナ部
770.　廃トナー箱部

810.　定着器
820.　定着器オイル塗布部
830.　定着クリーナ部
835.　クリーナ部

910.　メイン電源回路基板
920.　エディタパッド
921.　エディタ本体
930.　DCコントローラ回路基板
932.　リーダコントローラ部
935.　イメージプロセッサケース
937.　イメージプロセッサED回路基板
938.　イメージプロセッサECO回路基板
939.　イメージプロセッサメイン回路基板
941.　イメージプロセッサIF回路基板
947.　電位測定回路基板
950.　アナログプロセッサ部
960.　転写ドライバ回路基板
965.　スキャナドライバ部
967.　スキャナモータドライバ回路基板
971.　黒トナー濃度検知部
980.　HVT回路基板

目　次

981.　現像バイアス回路基板
990.　ランプレギュレータ回路基板

B.　コネクター一覧

D1.　部品索引表

CONTENTS

A. ASSEMBLY LOCATION DIAGRAM

001. ACCESSORIES/FIXING PLATE
020. SPECIAL TOOLS

100. EXTERNAL COVERS, PANELS, ETC.
101. MACHINE FRONT PLATE 1
102. MACHINE FRONT PLATE 2
103. MACHINE INTERNAL COMPONENTS 1
104. MACHINE INTERNAL COMPONENTS 2
105. MACHINE INTERNAL COMPONENTS 3
106. MACHINE INTERNAL COMPONENTS 4
107. MACHINE REAR PLATE 1
108. MACHINE REAR PLATE 2
109. MACHINE BOTTOM PLATE
110. POWER CORD TERMINAL ASSEMBLY (100/115/120V)
111. POWER CORD TERMINAL ASSEMBLY (220/240V)
120. PAPER PICK-UP DOOR ASSEMBLY
130. CONTROL PANEL ASSEMBLY
160. COPYBOARD COVER ASSEMBLY
180. COUNTER ASSEMBLY

240. TRANSFER CLEANING DRIVE ASSEMBLY
250. MAIN MOTOR ASSEMBLY
251. PAPER PICK-UP MOTOR ASSEMBLY
252. DEVELOPING UNIT DRIVE ASSEMBLY
253. FIXING MOTOR ASSEMBLY
255. DRUM MOTOR ASSEMBLY
260. REGIST. FEEDER DRIVE ASSEMBLY
261. DUPLEXING DRIVE ASSEMBLY (CLC950)
265. DUPLEX PRINT DRIVE ASSEMBLY (CLC950)
270. DEVELOPING ENGAGEMENT ASSEMBLY
275. TRANSFER CAM ASSEMBLY
290. WASTE TONER DRIVE ASSEMBLY

300. CASSETTE (LARGE)
305. CASSETTE (SMALL)
306. CASSETTE HEATER (LARGE FOR CLC920/950)
307. CASSETTE HEATER (SMALL FOR CLC900/920)
310. MANUAL FEED ASSEMBLY
311. MULTI FEED TRAY ASSEMBLY
312. UPPER PAPER PICK-UP ASSEMBLY
313. MIDDLE PAPER PICK-UP ASSEMBLY (CLC900)
313A. MIDDLE PAPER PICK-UP ASSEMBLY (CLC920)
314. LOWER PAPER PICK-UP ASSEMBLY (CLC920/950)
315. PAPER PICK-UP FEEDER ASSEMBLY (CLC950)
316. REVERSE ASSEMBLY (CLC950)
320. PRE-REGISTRATION GUIDE ASSEMBLY
351. PRE-REGISTRATION FEEDER ASSEMBLY
365. HOLDING TRAY ASSEMBLY (CLC950)
370. DELIVERY ASSEMBLY
375. INNER DELIVERY ASSEMBLY

420. MIRROR ASSEMBLY 1
430. READER ASSEMBLY

500. PHOTO SENSITIVE DRUM ASSEMBLY
530. TRANSFER DRUM ASSEMBLY
532. SEPARATION CLAW ASSEMBLY
535. TRANSFER FRAME ASSEMBLY
536. RETENSION ASSEMBLY
550. PRIMARY CORONA ASSEMBLY
580. SEPARATION CORONA ASSEMBLY
585. INTERNAL CORONA ASSEMBLY
590. OUTER CORONA ASSEMBLY

620. HOPPER MOUNT ASSEMBLY
621. HOPPER ASSEMBLY (BK/M/C)
622. HOPPER ASSEMBLY (Y)
640. DEVELOPING ASSEMBLY (M/C/Y)
642. DEVELOPING ASSEMBLY (BK)

710. TRANSFER CLEANING ASSEMBLY
770. WASTE TONER ASSEMBLY

810. FIXING ASSEMBLY
820. FIXING OIL APPLY ASSEMBLY
830. FIXING ROLLER CLEANING ASSEMBLY
835. DRUM CLEANING ASSEMBLY

910. MAIN POWER SUPPLY PCB ASSEMBLY
920. EDITOR PAD ASSEMBLY
921. EDITOR ASSEMBLY
930. DC CONTROLLER PCB ASSEMBLY
932. READER CONTROLLER ASSEMBLY
935. IMAGE PROCESSOR PCB CASE
937. IMAGE PROCESSOR ED PCB ASSEMBLY
938. IMAGE PROCESSOR ECO PCB ASSEMBLY
939. IMAGE PROCESSOR MAIN PCB ASSEMBLY
941. IMAGE PROCESSOR IF PCB ASSEMBLY
947. POTENTIAL MEASURING PCB ASSEMBLY
950. ANALOG PROCESSOR ASSEMBLY
960. TRANSFER DRIVER PCB ASSEMBLY
965. SCANNER DRIVER ASSEMBLY
967. SCANNER MOTOR DRIVER ASSEMBLY
971. BLACK TONER SENSOR ASSEMBLY
980. H.V. TRANSFORMER PCB ASSEMBLY

CONTENTS

981. DEVELOPING BIAS PCB ASSEMBLY
990. LAMP REGULATOR PCB ASSEMBLY

B. LIST OF CONNECTORS

D1. NUMERICAL INDEX

FIGURE A ASSEMBLY LOCATION DIAGRAM (1/8)
主要部品配置図 (1/8)

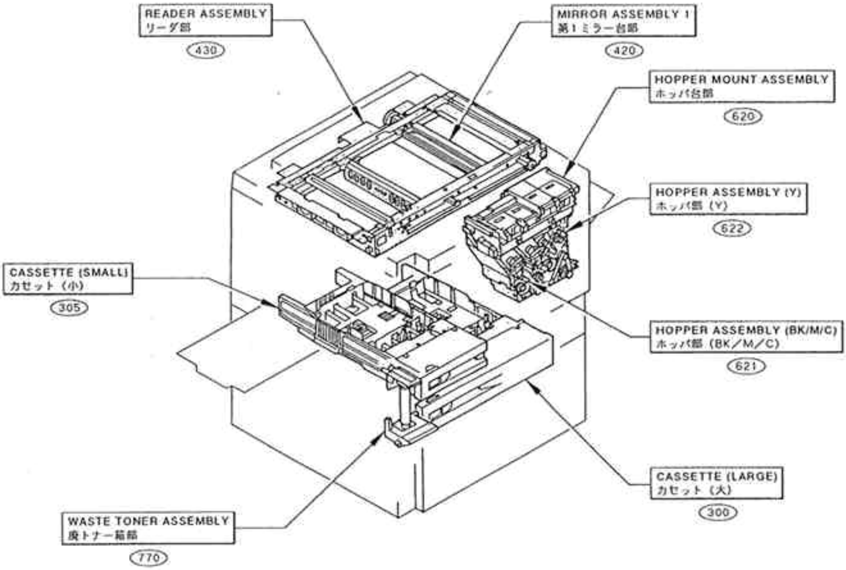

READER ASSEMBLY
リーダ部
430
MIRROR ASSEMBLY 1
第1ミラー台部
420
HOPPER MOUNT ASSEMBLY
ホッパ台部
620
HOPPER ASSEMBLY (Y)
ホッパ部 (Y)
622
CASSETTE (SMALL)
カセット (小)
305
HOPPER ASSEMBLY (BK/M/C)
ホッパ部 (BK／M／C)
621
CASSETTE (LARGE)
カセット (大)
300
WASTE TONER ASSEMBLY
廃トナー箱部
770

FIGURE A ASSEMBLY LOCATION DIAGRAM ($^2/_8$)

主要部品配置図 ($^2/_8$)

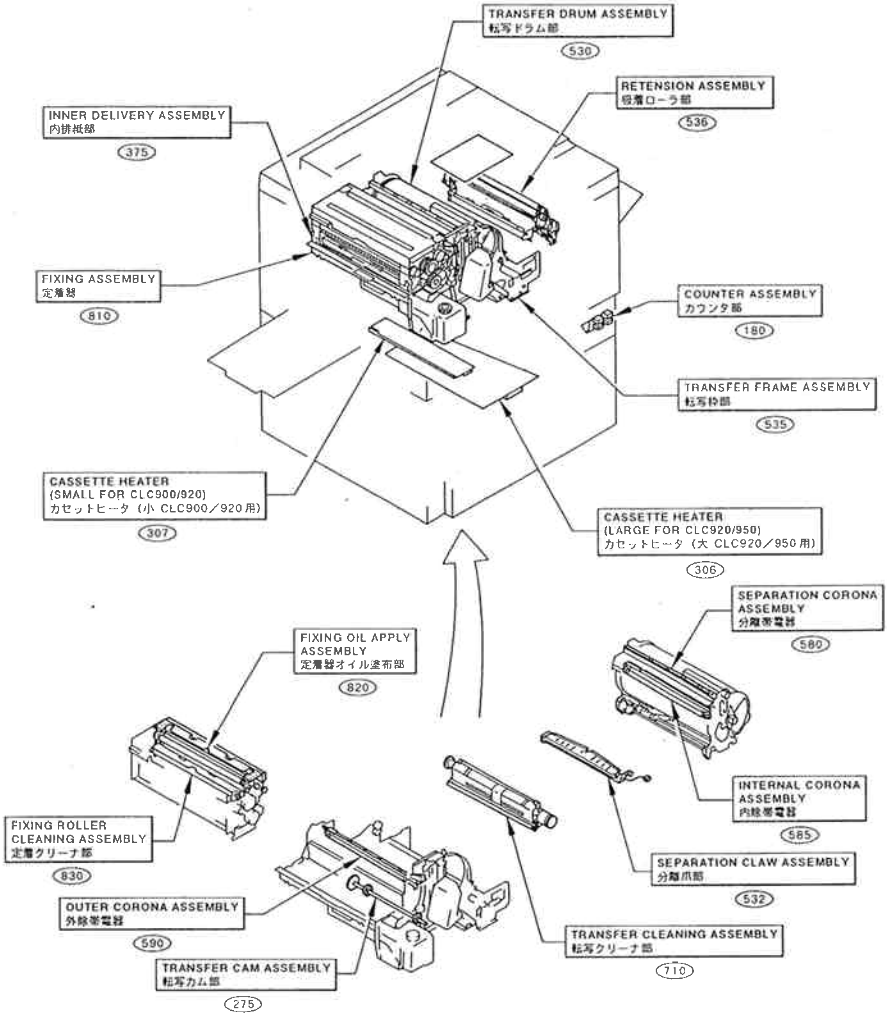

TRANSFER DRUM ASSEMBLY
転写ドラム部
530
RETENSION ASSEMBLY
吸着ローラ部
536
INNER DELIVERY ASSEMBLY
内排紙部
375
FIXING ASSEMBLY
定着器
810
COUNTER ASSEMBLY
カウンタ部
180
TRANSFER FRAME ASSEMBLY
転写枠部
535
CASSETTE HEATER
(SMALL FOR CLC900/920)
カセットヒータ（小 CLC900／920用)
307
CASSETTE HEATER
(LARGE FOR CLC920/950)
カセットヒータ（大 CLC920／950用)
306
SEPARATION CORONA ASSEMBLY
分離帯電器
580
FIXING OIL APPLY ASSEMBLY
定着器オイル塗布部
820
INTERNAL CORONA ASSEMBLY
内除帯電器
585
FIXING ROLLER CLEANING ASSEMBLY
定着クリーナ部
830
SEPARATION CLAW ASSEMBLY
分離爪部
532
OUTER CORONA ASSEMBLY
外除帯電器
590
TRANSFER CLEANING ASSEMBLY
転写クリーナ部
710
TRANSFER CAM ASSEMBLY
転写カム部
275

FIGURE A ASSEMBLY LOCATION DIAGRAM ($^3/_8$)
主要部品配置図 ($^3/_8$)

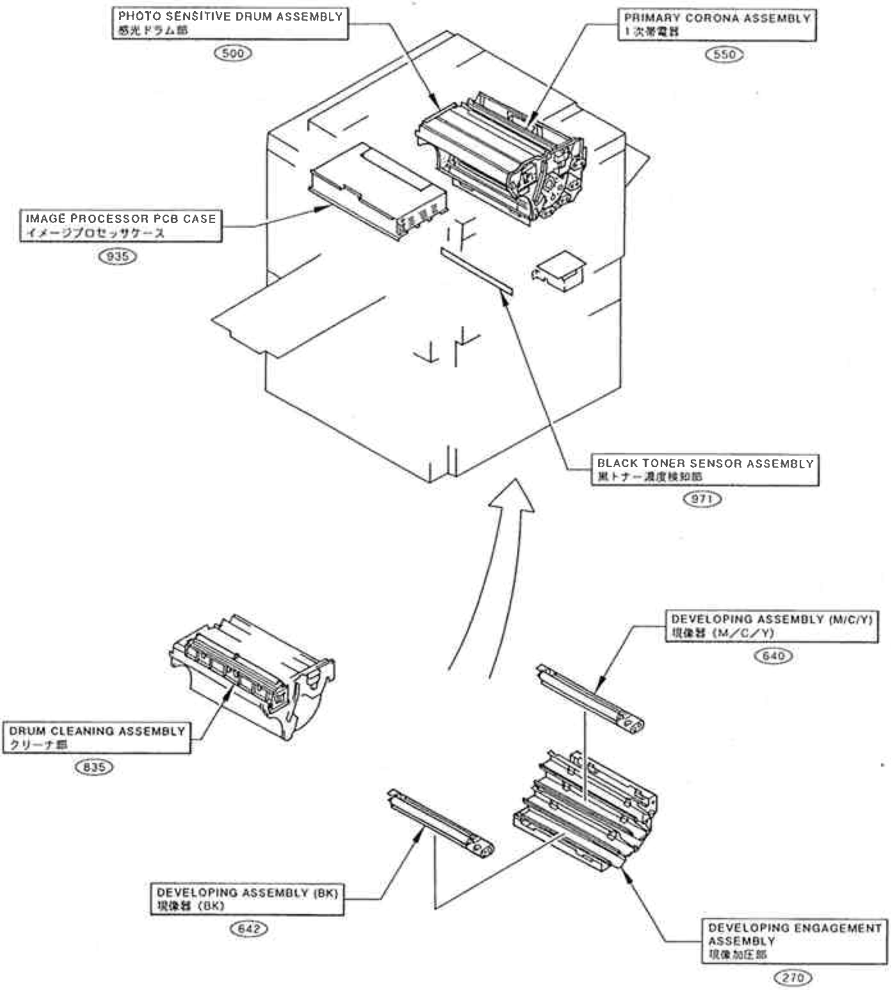


PHOTO SENSITIVE DRUM ASSEMBLY
感光ドラム部
500
PRIMARY CORONA ASSEMBLY
1次帯電器
550
IMAGE PROCESSOR PCB CASE
イメージプロセッサケース
935
BLACK TONER SENSOR ASSEMBLY
黒トナー濃度検知部
971
DEVELOPING ASSEMBLY (M/C/Y)
現像器 (M／C／Y)
640
DRUM CLEANING ASSEMBLY
クリーナ部
835
DEVELOPING ASSEMBLY (BK)
現像器 (BK)
642
DEVELOPING ENGAGEMENT ASSEMBLY
現像加圧部
270

FIGURE A

ASSEMBLY LOCATION DIAGRAM (4/8)(CLC900/920)
主要部品配置図 (4/8) (CLC900/920)

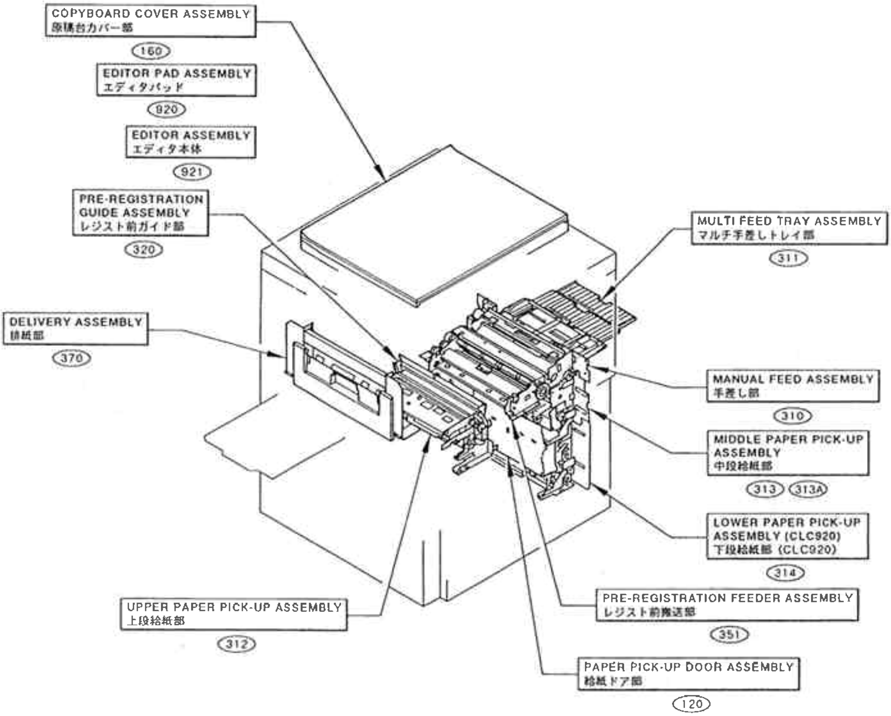

COPYBOARD COVER ASSEMBLY
原稿台カバー部
160
EDITOR PAD ASSEMBLY
エディタパッド
920
EDITOR ASSEMBLY
エディタ本体
921
PRE-REGISTRATION GUIDE ASSEMBLY
レジスト前ガイド部
320
DELIVERY ASSEMBLY
排紙部
370
MULTI FEED TRAY ASSEMBLY
マルチ手差しトレイ部
311
MANUAL FEED ASSEMBLY
手差し部
310
MIDDLE PAPER PICK-UP ASSEMBLY
中段給紙部
313
313A
LOWER PAPER PICK-UP ASSEMBLY (CLC920)
下段給紙部 (CLC920)
314
PRE-REGISTRATION FEEDER ASSEMBLY
レジスト前搬送部
351
UPPER PAPER PICK-UP ASSEMBLY
上段給紙部
312
PAPER PICK-UP DOOR ASSEMBLY
給紙ドア部
120

FIGURE A ASSEMBLY LOCATION DIAGRAM ($^5/_8$) (CLC950)
主要部品配置図 ($^5/_8$)(CLC950)

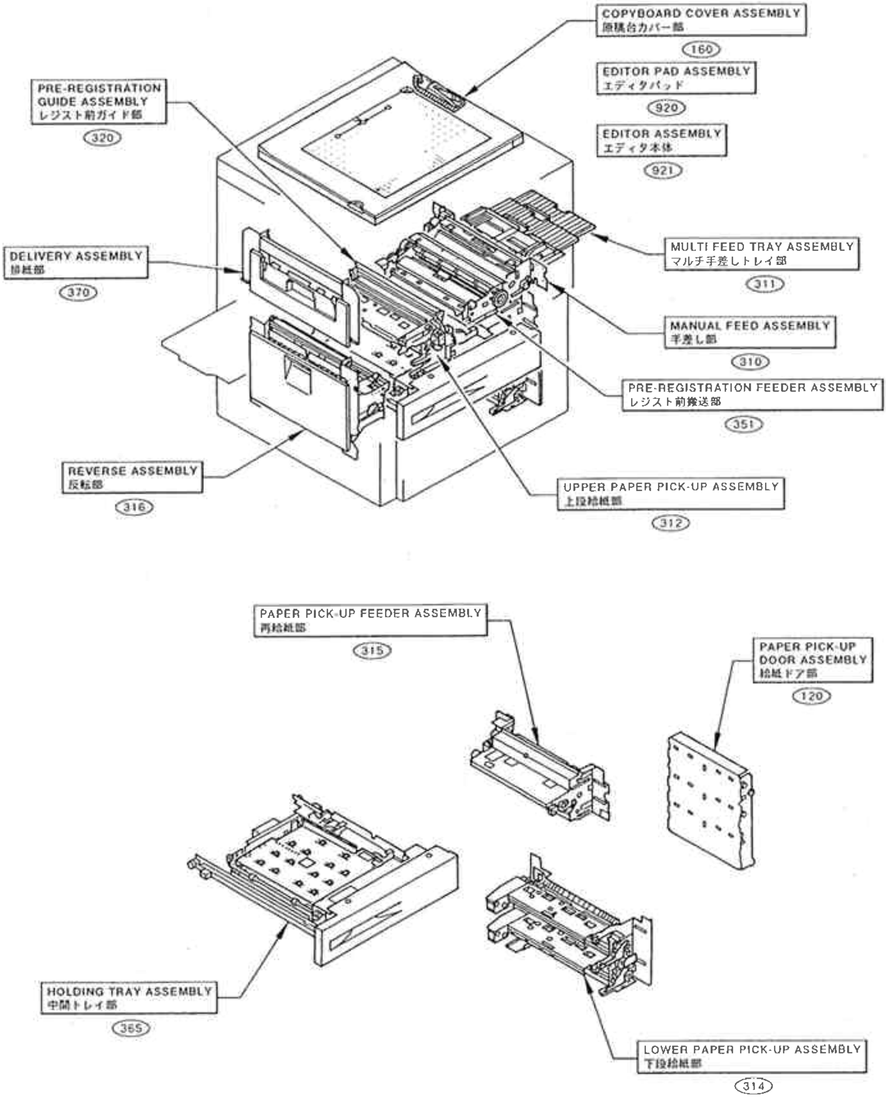

COPYBOARD COVER ASSEMBLY
原稿台カバー部
160
EDITOR PAD ASSEMBLY
エディタパッド
920
EDITOR ASSEMBLY
エディタ本体
921
PRE-REGISTRATION GUIDE ASSEMBLY
レジスト前ガイド部
320
DELIVERY ASSEMBLY
排紙部
370
MULTI FEED TRAY ASSEMBLY
マルチ手差しトレイ部
311
MANUAL FEED ASSEMBLY
手差し部
310
PRE-REGISTRATION FEEDER ASSEMBLY
レジスト前搬送部
351
REVERSE ASSEMBLY
反転部
316
UPPER PAPER PICK-UP ASSEMBLY
上段給紙部
312
PAPER PICK-UP FEEDER ASSEMBLY
再給紙部
315
PAPER PICK-UP DOOR ASSEMBLY
給紙ドア部
120
HOLDING TRAY ASSEMBLY
中間トレイ部
365
LOWER PAPER PICK-UP ASSEMBLY
下段給紙部
314

FIGURE A ASSEMBLY LOCATION DIAGRAM (6/8)(CLC900/920)
主要部品配置図 (6/8) (CLC900/920)

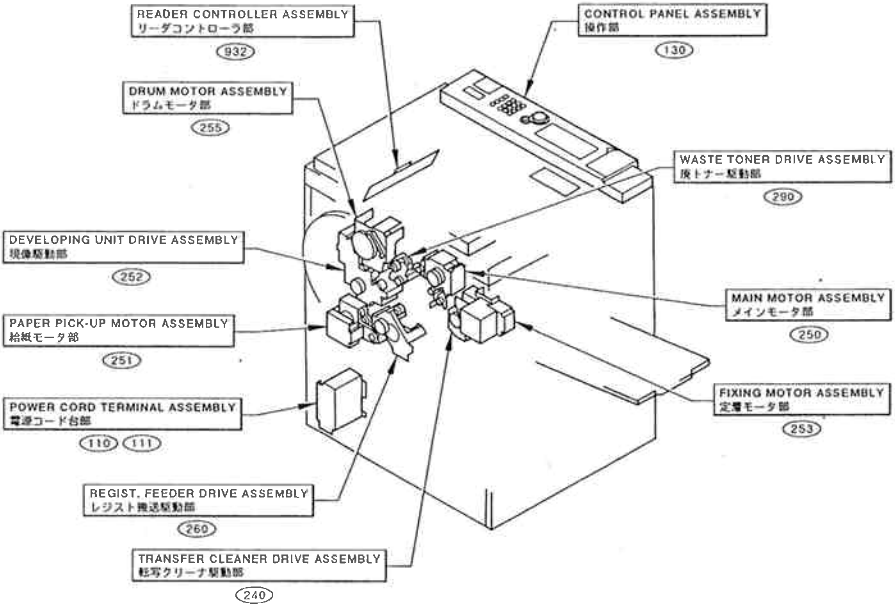

READER CONTROLLER ASSEMBLY
リーダコントローラ部
932
CONTROL PANEL ASSEMBLY
操作部
130
DRUM MOTOR ASSEMBLY
ドラムモータ部
255
WASTE TONER DRIVE ASSEMBLY
廃トナー駆動部
290
DEVELOPING UNIT DRIVE ASSEMBLY
現像駆動部
252
MAIN MOTOR ASSEMBLY
メインモータ部
250
PAPER PICK-UP MOTOR ASSEMBLY
給紙モータ部
251
FIXING MOTOR ASSEMBLY
定着モータ部
253
POWER CORD TERMINAL ASSEMBLY
電源コード台部
110
111
REGIST. FEEDER DRIVE ASSEMBLY
レジスト搬送駆動部
260
TRANSFER CLEANER DRIVE ASSEMBLY
転写クリーナ駆動部
240

FIGURE A . ASSEMBLY LOCATION DIAGRAM (7/8) (CLC950)
主要部品配置図 (7/8)(CLC950)

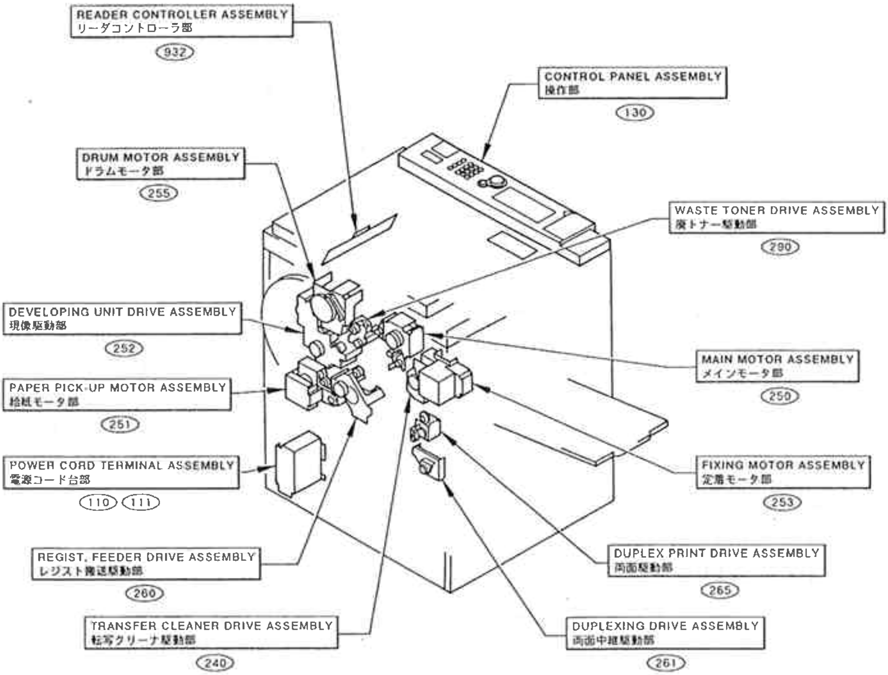
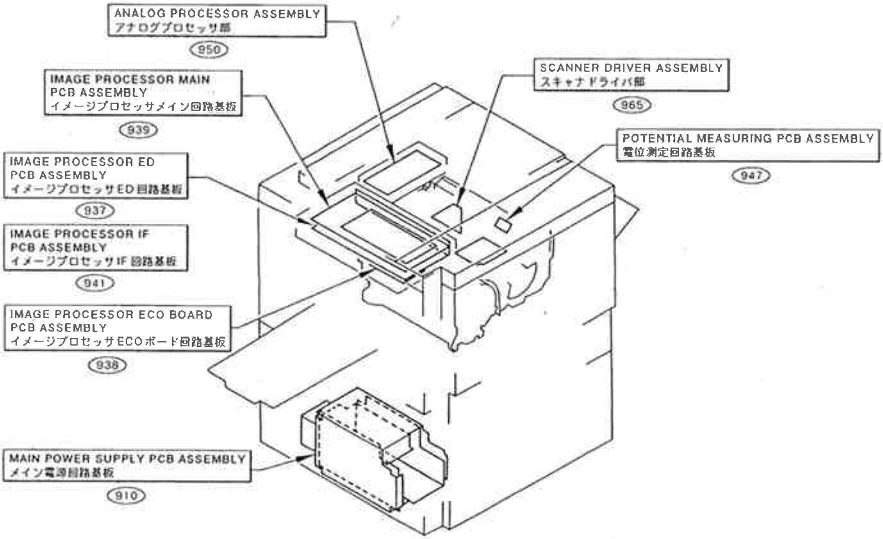

READER CONTROLLER ASSEMBLY
リーダコントローラ部
932
CONTROL PANEL ASSEMBLY
操作部
130
DRUM MOTOR ASSEMBLY
ドラムモータ部
255
WASTE TONER DRIVE ASSEMBLY
廃トナー駆動部
290
DEVELOPING UNIT DRIVE ASSEMBLY
現像駆動部
252
MAIN MOTOR ASSEMBLY
メインモータ部
250
PAPER PICK-UP MOTOR ASSEMBLY
給紙モータ部
251
POWER CORD TERMINAL ASSEMBLY
電源コード台部
110
111
FIXING MOTOR ASSEMBLY
定着モータ部
253
REGIST. FEEDER DRIVE ASSEMBLY
レジスト搬送駆動部
260
DUPLEX PRINT DRIVE ASSEMBLY
両面駆動部
265
TRANSFER CLEANER DRIVE ASSEMBLY
転写クリーナ駆動部
240
DUPLEXING DRIVE ASSEMBLY
両面中継駆動部
261

FIGURE A ASSEMBLY LOCATION DIAGRAM (8/8)
主要部品配置図 (8/8)


ANALOG PROCESSOR ASSEMBLY
アナログプロセッサ部
950
IMAGE PROCESSOR MAIN PCB ASSEMBLY
イメージプロセッサメイン回路基板
939
IMAGE PROCESSOR ED PCB ASSEMBLY
イメージプロセッサED回路基板
937
IMAGE PROCESSOR IF PCB ASSEMBLY
イメージプロセッサIF回路基板
941
IMAGE PROCESSOR ECO BOARD PCB ASSEMBLY
イメージプロセッサECOボード回路基板
938
MAIN POWER SUPPLY PCB ASSEMBLY
メイン電源回路基板
910
SCANNER DRIVER ASSEMBLY
スキャナドライバ部
965
POTENTIAL MEASURING PCB ASSEMBLY
電位測定回路基板
947

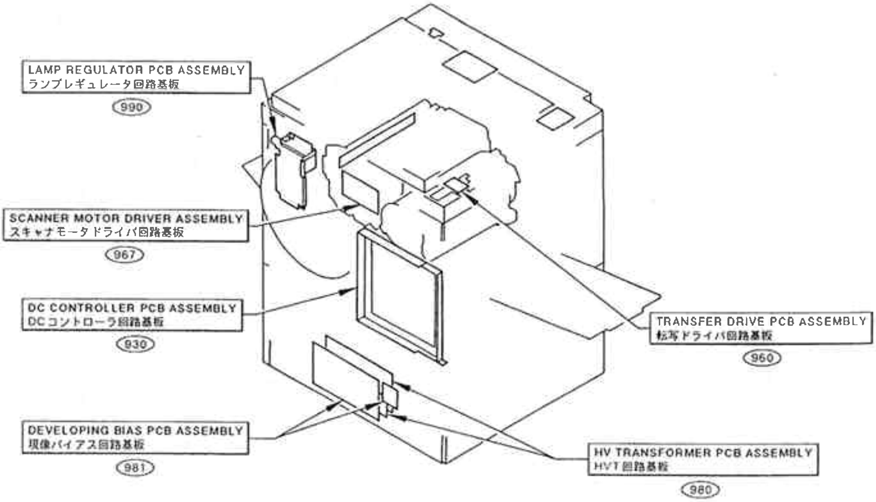

LAMP REGULATOR PCB ASSEMBLY
ランプレギュレータ回路基板
990
SCANNER MOTOR DRIVER ASSEMBLY
スキャナモータドライバ回路基板
967
DC CONTROLLER PCB ASSEMBLY
DCコントローラ回路基板
930
DEVELOPING BIAS PCB ASSEMBLY
現像バイアス回路基板
981
TRANSFER DRIVE PCB ASSEMBLY
転写ドライバ回路基板
960
HV TRANSFORMER PCB ASSEMBLY
HVT回路基板
980

FIGURE 001 ACCESSORIES/FIXING PLATE
消耗品／取付金具

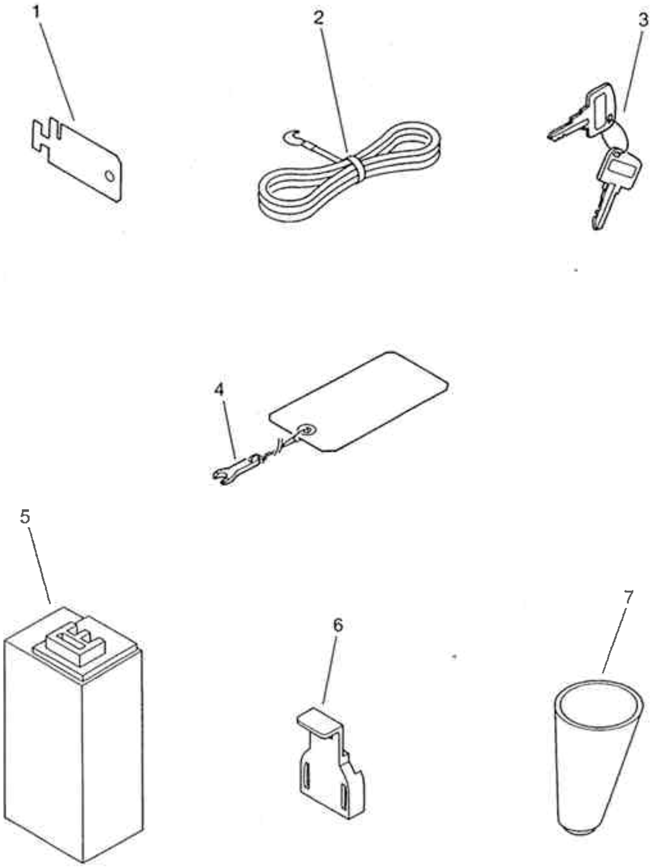


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
001 –	NPN		RF	ACCESSORIES/FIXING PLATE ショウモウヒン/トリツケカナグ	
1	FA6 – 1146 – 000		1	PLATE, DOOR SWITCH ドア スイッチ バン	
2	FH2 – 5006 – 000		1	WIRE, GROUNDING アース コード	
3	FF2 – 5915 – 000		1	KEY, SWITCH スイッチ キー	
4	FF9 – 1245 – 000	N	2	LATCH, RELEASE カイジョ コマ	
5	FY9 – 7006 – 020		1	RECEPTACLE, WASTE TONER ハイトナー カミ パック	
6	FG5 – 3926 – 000		1	STOP, TONER トナー セン	
7	FB2 – 8719 – 000		4	FUNNEL ホキュウ ロート	

FIGURE 020 SPECIAL TOOLS
特殊工具

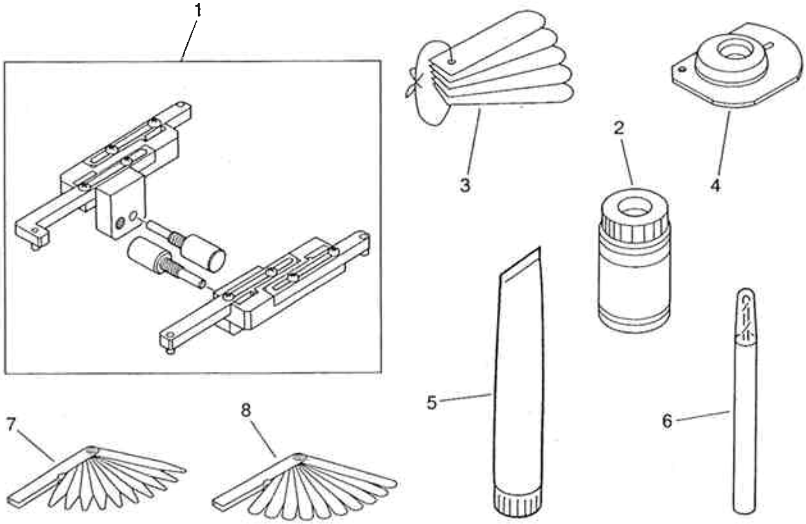


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
020 –	NPN		RF	SPECIAL TOOLS トクシュ コウグ	
1	FY9 – 3002 – 000		1	MIRROR POSITIONING TOOL チョウセイグ	
2	TKN – 0480 – 000		1	LUBRICANT, CLEANING ASSEMBLY ドラムクリーナ ジュンカツザイ	
3	FY9 – 3015 – 000		1	GAP GAUGE スキマ ゲージ	
4	FY9 – 3016 – 000		1	TOOL, DRUM SHAFT POSITIONING ドラム ジク イチキメ コウグ	
5	FY9 – 6005 – 000		1	GREASE, SUPER LUBE スーパー ルーブ グリス	
6	FY9 – 6006 – 000		1	OIL, SUPER LUBE スーパー ルーブ オイル	
7	CK – 0057 – 000		1	GAP GAUGE スキマ ゲージ	
8	CK – 0061 – 000		1	GAP GAUGE スキマ ゲージ	

FIGURE 100 EXTERNAL COVERS, PANELS, ETC.
外装カバー

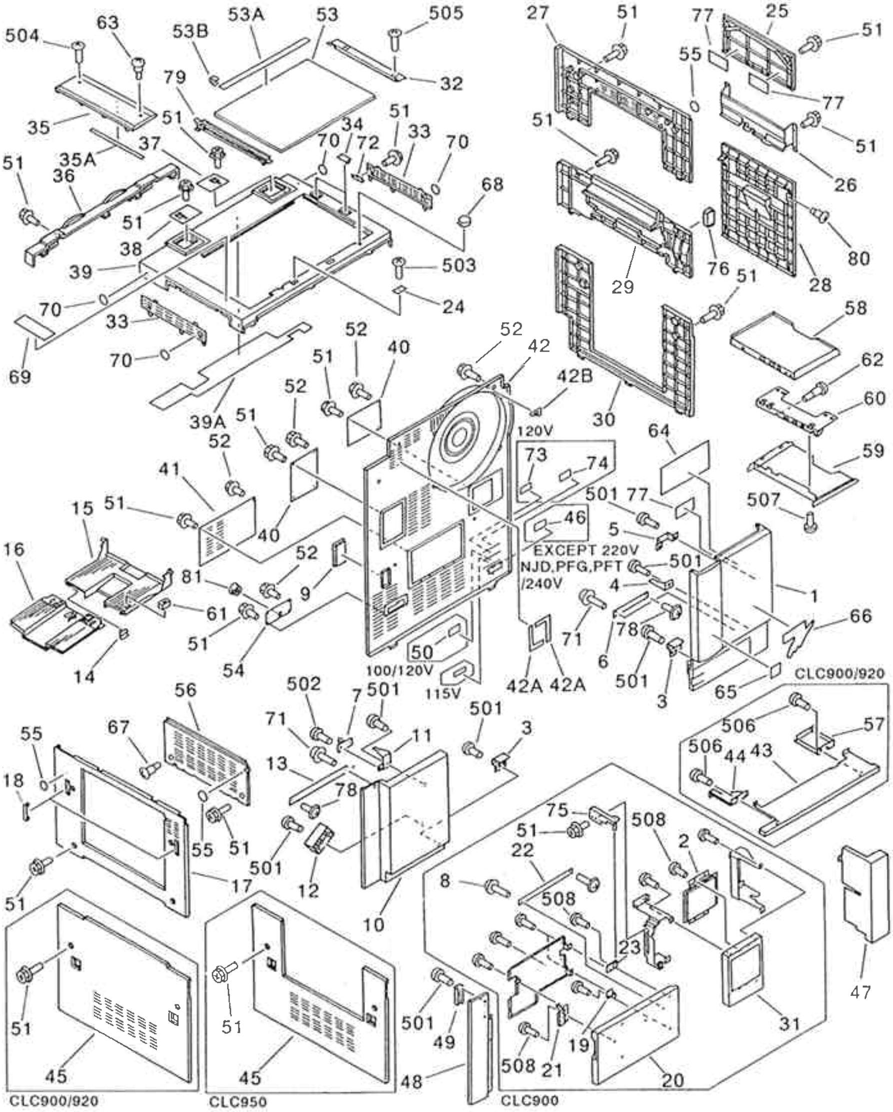

504
63
53B
53A
53
505
32
79
35
35A
37
51
34
72
70
33
36
38
39
70
33
69
70
39A
68
503
24
27
51
77
25
55
77
26
80
29
76
28
30
58
62
60
59
64
52
42
42B
120V
73
74
46
EXCEPT 220V
NJD,PFG,PFT
/240V
50
100/120V
115V
42A
42A
40
41
15
16
81
61
14
54
9
501
77
507
5
4
1
66
71
78
6
3
65
CLC900/920
57
506
44
43
56
67
55
18
17
502
7
11
13
78
12
10
75
508
2
22
8
23
19
21
20
31
47
49
48
45
CLC900/920
CLC950
CLC900

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
100 –	NPN		RF	EXTERNAL COVERS, PANELS, ETC. ガイソウ カバー	
1	FB3 – 9800 – 000		1	DOOR, RIGHT ミギ ドア	
2	FB4 – 2736 – 000		1	PANEL, PEDESTAL ペディスタル カバー	**CLC900**
3	FB2 – 9896 – 000		2	MOUNT, MAGNET, LOWER マグネット ダイ (シタ)	
4	FB2 – 1859 – 000		1	PLATE, DOOR SWITCH, RIGHT ドア スイッチ バン (ミギ)	
5	FB2 – 1860 – 000		1	SUPPORT, MAGNET, RIGHT マグネット シバン (ミギ)	
6	FB2 – 4385 – 000		1	TAPE, HOLD ホールド テープ	
7	XZ9 – 0124 – 000		1	LATCH, ROLLER – ACTION (STRIKE) ローラ キャッチ (オス)	
8	XA9 – 0782 – 000		1	SCREW, M4X8 タップタイト セムスネジ	**CLC900**
9	FH2 – 5831 – 000		1	COVER, CONNECTOR コネクタ カバー	
10	FB3 – 9799 – 000		1	DOOR, LEFT ヒダリ ドア	
11	FB2 – 1846 – 000		1	PLATE, DOOR SWITCH, LEFT ドア スイッチ バン (ヒダリ)	
12	FB2 – 1850 – 000		1	PLATE, FOOL – PROOF フール プルーフ ダイ	
13	FB2 – 4385 – 000		1	TAPE, HOLD ホールド テープ	
14	FB1 – 7197 – 000		2	GUIDE, TRAY, COPY ハイシ トレイ ガイド	
15	FB2 – 4436 – 000		1	TRAY, COPY, 1 ハイシ トレイ (1)	
16	FB2 – 4437 – 000		1	TRAY, COPY, 2 ハイシ トレイ (2)	
17	FB2 – 1842 – 000		1	COVER, LEFT, UPPER ヒダリ ウエ カバー	
18	FB2 – 4445 – 020		2	CAP, COVER カバー キャップ	
19	FB4 – 6252 – 000		1	MOUNT, PANEL, FRONT LOWER, 2 マエ シタ ドア シバン (2)	CLC900
20	FB4 – 2739 – 000		1	DOOR, FRONT LOWER マエ シタ ドア	CLC900
21	FB4 – 6253 – 000		1	PLATE, MAGNET マグネット キャッチ プレート	CLC900
22	FB2 – 2591 – 000		1	STRAP, DOOR SUPPORT ドア ササエ テープ	CLC900
23	FB4 – 6251 – 000		1	MOUNT, PANEL, FRONT LOWER, 1 マエ シタ ドア シバン (1)	CLC900
24	FA3 – 9315 – 000		2	PLATE, COVER メカクシ カバー	
25	FB2 – 2583 – 000		1	COVER, SCANNER, CONTROLLER スキャナ コントローラ カバー	
26	FB1 – 7626 – 000		1	COVER, MULTI マルチ カバー	
27	FB2 – 1855 – 000		1	COVER, RIGHT, UPPER ミギ ウエ カバー	
28	FB2 – 1854 – 030		1	COVER, DOOR, PICK – UP キュウシ ドア カバー	
29	FB2 – 2584 – 000		1	COVER, RIGHT, CENTER ミギ ナカ カバー	

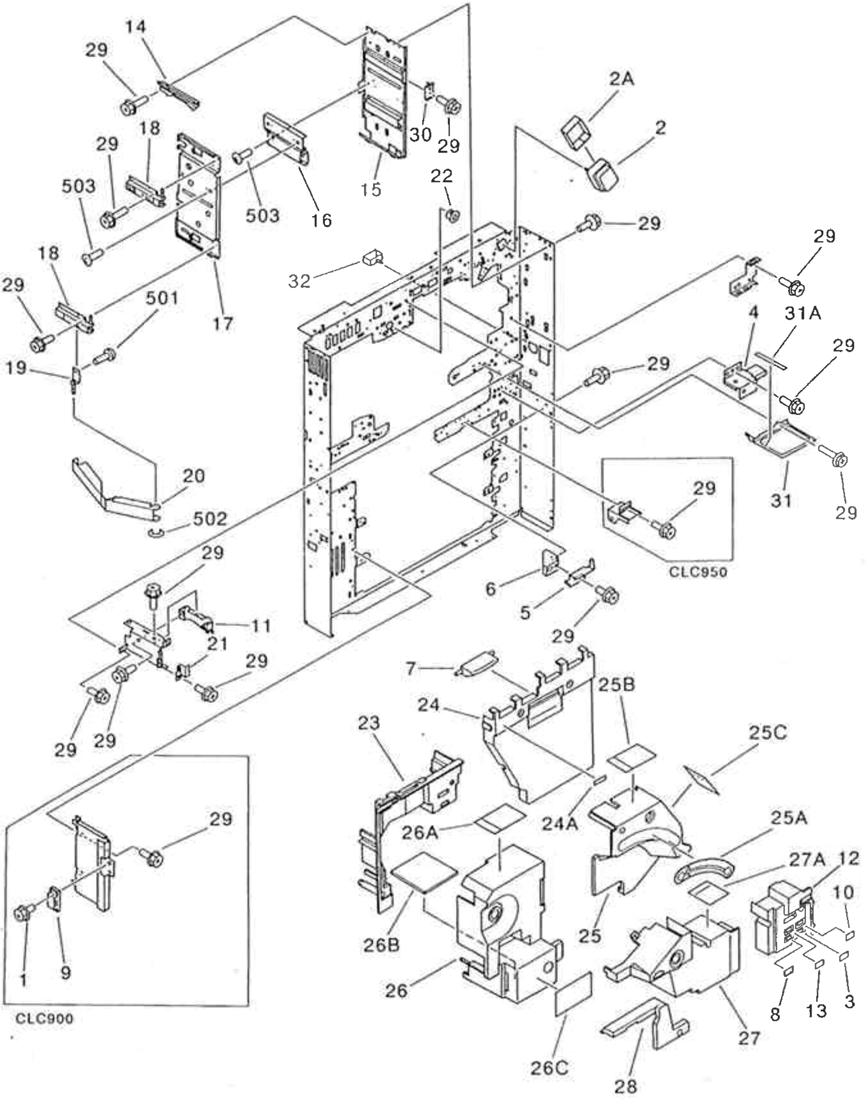
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
100 – 30	FB2 – 1853 – 000		1	COVER, RIGHT, LOWER ミギ シタ カバー	
31	FB4 – 2737 – 000		1	COVER, RIGHT LOWER ミギ シタ カバー	CLC900
32	FB2 – 2576 – 000		1	RETAINER, GLASS, RIGHT ミギ ガラス オサエ	
33	FB2 – 2575 – 000		2	COVER, UPPER, RIGHT ウエ カバー (ミギ)	
34	FB2 – 4457 – 000		2	PLATE, BLANKING, COVER, UPPER ウエ カバー メカクシ バン	
35	FF5 – 2308 – 000		1	COVER, UPPER, LEFT ジョウメン ヒダリ カバー	100V
	FF5 – 2309 – 000		1	COVER, UPPER, LEFT ジョウメン ヒダリ カバー	120V
	FF5 – 2310 – 000		1	COVER, UPPER, LEFT ジョウメン ヒダリ カバー	220/240V QBX,QBY,QBZ
	FF5 – 2311 – 000		1	COVER, UPPER, LEFT ジョウメン ヒダリ カバー	115V/220V PFE 240V RCB,RCC,RCD
35A	FB1 – 8778 – 000		1	SHEET, PLATE トツニュウ ボウシ シート	
36	FB2 – 2574 – 000		1	COVER, UPPER, REAR ウエ カバー (ウシロ)	
37	FB2 – 6282 – 000		1	COVER, POCKET, RIGHT ポケット カバー (ミギ)	
38	FB2 – 6281 – 000		1	COVER, POCKET, LEFT ポケット カバー (ヒダリ)	
39	FF5 – 2366 – 000		1	COVER, UPPER ウエ カバー	
39A	FB2 – 9934 – 000		1	SHEET, NOISE ノイズ シート	
40	FB1 – 7157 – 000		2	COVER メカクシ カバー	
41	FB2 – 2572 – 000		1	COVER, FAN ファン カバー	
42	FF5 – 2369 – 050		1	COVER, REAR ウシロ カバー	
42A	FB3 – 0882 – 000		2	SHIELD, DELIVERY ハイキ シールド	
42B	FB3 – 1421 – 000		1	SEAL, DUCT ダクト シール	
43	FB2 – 4458 – 000		1	COVER, GAP ギャップ カバー	CLC900/920
44	FB2 – 4459 – 000		1	MOUNT, COVER, GAP, 1 ギャップ カバー ダイ (1)	CLC900/920
45	FB2 – 4449 – 000		1	COVER, LEFT, LOWER ヒダリ シタ カバー	CLC900/920
	FB2 – 1861 – 000		1	COVER, LEFT, LOWER ヒダリ シタ カバー	CLC950
46	ME1 – 0025 – 000		1	LABEL, "LASER CLASS 1" レーザ クラス ラベル	EXCEPT 220V NJD,PFG, PFT/240V
47	FB2 – 1835 – 000		1	COVER, RIGHT, FRONT, LOWER マエ ミギ シタ カバー	
48	FB2 – 1834 – 000		1	COVER, WASTE TONER ハイ トナー カバー	
49	FB2 – 1839 – 000		1	PLATE, SUPPORT ウケ イタ	
50	ME1 – 0001 – 000		1	LABEL, "VCCI – 1" VCCI – 1 ラベル	100V
	FC1 – 9392 – 020		1	LABEL, "CDRH" CDRH ラベル	120V

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
100 – 51	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
52	XA9 – 0633 – 000		AR	SCREW,W/WASHER,M4X8 ザツキ ネジ	
53	FF5 – 2139 – 020		1	GLASS, COPYBOARD ゲンコウダイ ガラス	AB SIZE
	FF5 – 2335 – 020		1	GLASS, COPYBOARD ゲンコウダイ ガラス	A/INCH SIZE
	FF5 – 2338 – 020		1	GLASS, COPYBOARD ゲンコウダイ ガラス	A SIZE
	FF5 – 2339 – 020		1	GLASS, COPYBOARD ゲンコウダイ ガラス	AB/INCH SIZE
53A	FS5 – 8800 – 000		1	PLATE, LENGH INDEX ヨコ サイズ プレート	AB SIZE
	FS5 – 8809 – 000		1	PLATE, LENGH INDEX ヨコ サイズ プレート	A/INCH SIZE
	FS5 – 8810 – 000		1	PLATE, LENGH INDEX ヨコ サイズ プレート	A SIZE
	FS5 – 8811 – 000		1	PLATE, LENGH INDEX ヨコ サイズ プレート	AB/INCH SIZE
53B	FB1 – 7890 – 000		1	SPRING, LEAF イタ バネ	
54	FB4 – 2741 – 000		1	PLATE, BLANKING メカクシ バン	
55	FB2 – 4456 – 000		8	SEAL, アナフサギ シール	
56	FB2 – 1841 – 020		1	COVER, IP IP カバー	
57	FB2 – 2592 – 000		1	MOUNT, COVER, GAP, 2 ギャップ カバー ダイ (2)	CLC900/920
58	FB1 – 7737 – 000		1	TABLE, DOCUMENT, UPPER ゲンコウ オキダイ (ウエ)	
59	FB1 – 7738 – 000		1	TABLE, DOCUMENT, LOWER ゲンコウ オキダイ (シタ)	
60	FA9 – 3389 – 000		1	SUPPORT, DOCUMENT TABLE ゲンコウ オキダイ シバン	
61	XZ9 – 0406 – 000		1	CATCH, MAGNET マグネット キャッチ	
62	FS5 – 9161 – 000		2	SCREW, STEPPED, M4 ダンビス	
63	FS1 – 9010 – 000		1	SCREW,STEPPED,M3X2.2 ダンビス	
64	FS5 – 8818 – 000		1	LABEL, "TONER REPLACEMENT" トナー ホキュウ ラベル	
65	FB4 – 6231 – 000		1	EMBLEM エンブレム	CLC900 NJB,LJL,PFF CLC900 NJC,PFG,RCB
	FB4 – 6232 – 000		1	EMBLEM エンブレム	CLC900 PFW,QBX,TBC CLC900 UDK
	FB4 – 6233 – 000		1	EMBLEM エンブレム	CLC900 SBB
	FB4 – 6234 – 000		1	EMBLEM エンブレム	CLC920 LJN,RCC
	FB4 – 6235 – 000		1	EMBLEM エンブレム	CLC920 PFX,QBY,TBD CLC920 UDL
	FB4 – 6236 – 000		1	EMBLEM エンブレム	CLC920 SBC
	FB4 – 6237 – 000		1	EMBLEM エンブレム	CLC950 LJP,NJD,PFT CLC950 RCD
	FB4 – 6238 – 000		1	EMBLEM エンブレム	CLC950 PFZ,QBZ,TBE CLC950 UDM

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
100 – 65	FB4 – 6239 – 000		1	EMBLEM エンブレム	CLC950 SBD
66	FS6 – 8487 – 000		1	LABEL, "COLOR MARK" カラー マーク	100V
	FS6 – 8489 – 000		1	LABEL, "COLOR MARK" カラー マーク	120V
	FS5 – 8822 – 000		1	LABEL, "COLOR MARK" カラー マーク	CLC900 220V PFE
	FS6 – 8488 – 000		1	LABEL, "COLOR MARK" カラー マーク ラベル	220V PFW,PFX,PFZ UDK,UDL,UDM
67	FS5 – 9343 – 000		1	SCREW, STEPPED, M4 ダンビス	
68	FB2 – 6330 – 000		2	COVER, RUBBER カバー ゴム	
69	FS5 – 8828 – 000		1	LABEL, "LEGAL LIMITATION" コピー キンシ ラベル	JAPANESE
	FS5 – 8829 – 000		1	LABEL, "LEGAL LIMITATIONS" コピー キンシ ラベル	ENGLISH NJB,NJC,NJD PFG,PFT/ILLUSTRATION
	FS5 – 8832 – 000		1	LABEL, "LEGAL LIMITATIONS" コピー キンシ ラベル	ENGLISH QBX,QBY,QBZ RCB,RCC,RCD
	FS6 – 8490 – 000		1	LABEL, "LEGAL LIMITATION" コピー キンシ ラベル	ITALIAN
	FC2 – 3090 – 000		1	LABEL, "LEGAL LIMITATIONS" コピー キンシ ラベル	KOREAN
	FS5 – 8830 – 000		1	LABEL, "LEGAL LIMITATIONS" コピー キンシ ラベル	FRENCH
	FS5 – 8831 – 000		1	LABEL, "LEGAL LIMITATIONS" コピー キンシ ラベル	GERMAN
70	FB2 – 8704 – 000		6	SEAL, 2 シール (2)	
71	XA9 – 0782 – 000		2	SCREW, M4X8 タップタイト セムスネジ	
72	FB2 – 8703 – 000		1	PLATE, TRAY COPYBOARD, RIGHT ゲンコウ オキダイ トリツケ バン (ミギ)	
73	ME1 – 0017 – 000		1	LABEL, "FCC" FCC ラベル	120V
74	ME1 – 0058 – 000		1	LABEL, NOISE ノイズ ラベル	120V
75	FF5 – 2255 – 000		1	HINGE ヒンジ	CLC900
76	XZ9 – 0353 – 000		1	CATCH, MAGNET マグネット キャッチ	
77	FS5 – 8837 – 030		1	LABEL, DC CONTROLLER DC コントローラ ラベル	
78	XA9 – 0783 – 000		2	SCREW,RS,M4X12 RS タイト セムス ネジ	
79	FF5 – 4047 – 000		1	RETAINER, GLASS, LEFT ヒダリ ガラス オサエ	CLC900/920
	FF5 – 4876 – 000		1	RETAINER, GLASS, LEFT ヒダリ ガラス オサエ	CLC950
80	FS1 – 9169 – 000		4	SCREW,STEPPED,M3 ダンビス	
81	WT2 – 0171 – 000		1	BUSHING ブッシング	NEXT ASSY F24 – 6504,6514
501	XB4 – 7400 – 809		AR	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	
502	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB1 – 3400 – 806		2	SCREW,MACH.,C.S. HEAD,M4X8 サラ ネジ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
100 – 504	XB1 – 2300 – 607		5	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
505	XB6 – 7300 – 407		2	SCREW,TP,M3X4 TP ネジ	
506	XB4 – 7400 – 809		2	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	CLC900/920
507	XB4 – 7300 – 609		2	SCREW,TAPPING,TRUSS HEAD,M3X6 バインド タッピン ネジ	
508	XB4 – 7400 – 809		3	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	CLC900

FIGURE 101 MACHINE FRONT PLATE 1
本体前側板（1）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31A
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CLC950
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25B
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25C
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24A
26A
25A
27A
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CLC900
26C
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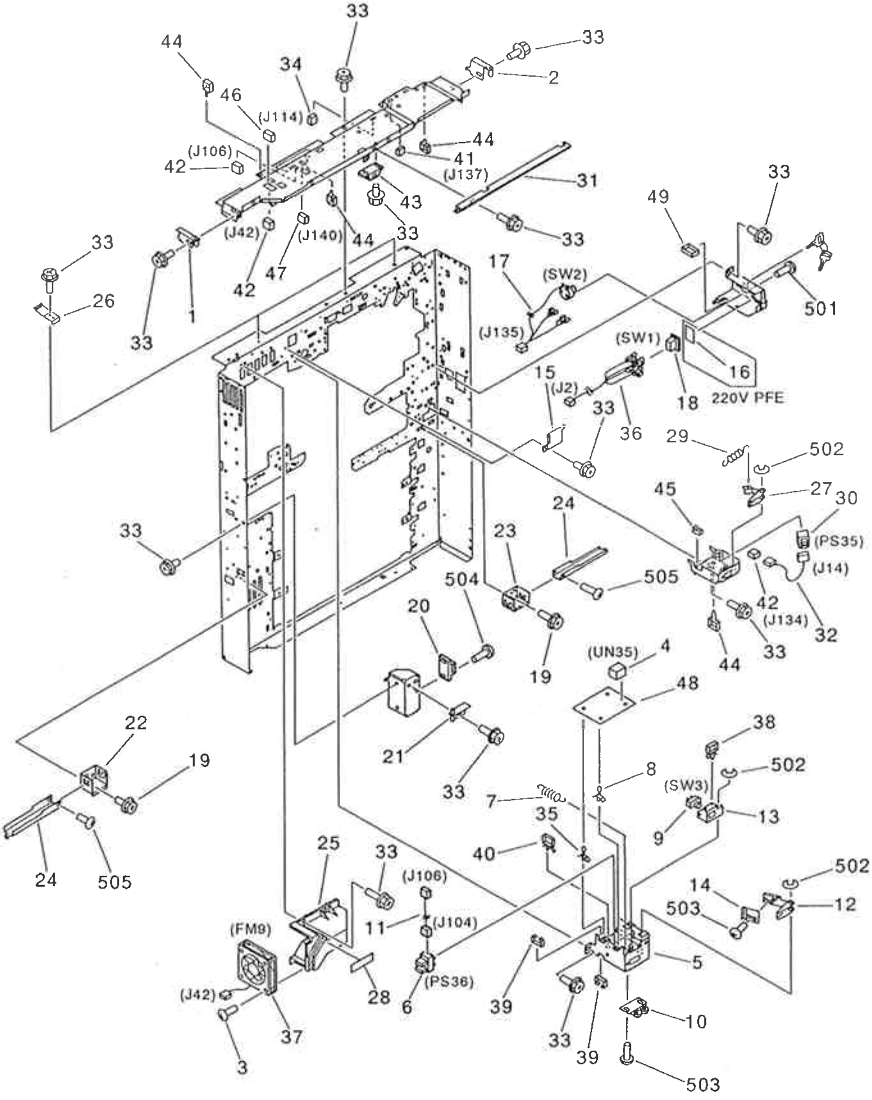
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
101 –	NPN		RF	MACHINE FRONT PLATE 1 ホンタイ マエ ソクバン (1)	
1	XA9 – 0789 – 000		2	SCREW,RS,M4X8 RS タイト ネジ	CLC900
2	FF5 – 2027 – 000	N	2	COVER, MIRROR ミラー カバー	
2A	FB2 – 0124 – 000		1	SEAL, COVER, MIRROR ミラー カバー シール	
3	FS5 – 8847 – 000		1	LABEL, COUNTER, C – P カウンタ ラベル (C – P)	100V
	FS5 – 8845 – 000		1	LABEL, COUNTER, F – S カウンタ ラベル (F – S)	115/120/220V PFW,PFE PFX,PFZ,PFG,PFT,UDK UDL,UDM
4	FB2 – 4387 – 000		1	COVER カバー	
5	FF5 – 2198 – 000		1	HINGE, DOOR, RIGHT, LOWER ドア ヒンジ (ミギ シタ)	
6	FB2 – 1852 – 000		1	MOUNT, HINGE ヒンジ キダイ	
7	FB2 – 0794 – 000		1	KNOB, HOPPER ホッパ トッテ	
8	FS5 – 8846 – 000		1	LABEL, COUNTER, C – C カウンタ ラベル (C – C)	100V
	FS5 – 8841 – 000		1	LABEL, COUNTER, F カウンタ ラベル (F)	220V SBB,SBC,SBD,TBC TBD,TBE/240V
	FS5 – 8844 – 000		1	LABEL, COUNTER, F – L カウンタ ラベル (F – L)	115/120/220V PFW,PFE PFX,PFZ,PFG,PFT,UDK UDL,UDM
9	XZ9 – 0240 – 000		1	CATCH, MAGNET マグネット キヤツチ	CLC900
10	FS5 – 8842 – 000		1	LABEL, COUNTER, M カウンタ ラベル (M)	220V PFE,PFG,PFT
	FS5 – 8843 – 000		1	LABEL, COUNTER, BK カウンタ ラベル (BK)	
11	FB2 – 9010 – 000		1	MOUNT, HOPPER, LEFT, 2 ホッパ ヒダリ シバン (2)	
12	FB2 – 2570 – 020		1	COVER, COUNTER カウンタ カバー	
13	FS5 – 8840 – 000		1	LABEL, COUNTER, T カウンタ ラベル (T)	
14	FB2 – 9009 – 000		1	SUPPORT, LOCK, HOPPER ホッパ ロック シバン (ミギ)	
15	FB2 – 0780 – 000		1	PLATE, SLIDE, HOPPER ホッパ スライド シバン	
16	XZ9 – 0390 – 000		1	RAIL, HOPPER ホッパ レール	
17	FB2 – 0781 – 000		1	PLATE, SLIDE, HOPPER ホッパ スライド シバン	
18	FF5 – 4030 – 000		2	MOUNT, HOPPER ホッパ シバン	
19	FF5 – 2127 – 000		1	SUPPORT, GUIDE, CABLE ソクセン ガイド シバン	
20	FB2 – 9115 – 000		1	GUIDE, CABLE ソクセン ガイド	
21	FB2 – 4454 – 000		1	PLATE, STOP スライド ストッパ	
22	WT2 – 0171 – 000		1	BUSHING ブッシング	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
101 − 23	FB2 − 2569 − 000		1	COVER, INTERNAL ホンタイ ウチ カバー	
24	FF5 − 2304 − 000	N	1	COVER, HOPPER ホッパ カバー	
24A	FS6 − 8071 − 000		1	LABEL, "HOPPER ARROW" ホッパ ヤジルシ ラベル	
25	FF5 − 2302 − 000	N	1	COVER, TRANSFER ASSEMBLY テンシャ カバー	
25A	FS5 − 8812 − 000		1	LABEL, "LEVER" レバー ヤジルシ ラベル	
25B	FS5 − 8815 − 000		1	LABEL, "JAM 2" ジャムショリ ラベル (2)	
25C	FS5 − 8816 − 000		1	LABEL, "JAM 3" ジャムショリ ラベル (3)	
26	FF5 − 2301 − 020		1	COVER, FIXING ASSEMBLY テイチャクキ カバー	
26A	FS5 − 8814 − 000		1	LABEL, "JAM 1" ジャムショリ ラベル (1)	
26B	FB3 − 5850 − 000		1	PAD, OIL ABSORPTION オイル パッド	
26C	FS6 − 8081 − 000		1	LABEL, OIL SUPPLY オイル サプライ ラベル	
27	FF5 − 2303 − 000	N	1	COVER, HORIZONTAL PATH ヨコパス カバー	
27A	FS5 − 8817 − 000		1	LABEL, "JAM 4" ジャムショリ ラベル (4)	
28	FB2 − 1856 − 000		1	COVER, PICK − UP, UPPER ジョウダン キュウシ カバー	
29	XA9 − 0629 − 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
30	FB2 − 9912 − 000		1	STOP, SLIDE, RIGHT スライド ストッパ(ミギ)	
31	FF5 − 4064 − 000		1	PLATE, TONER トナー ウケ	
31A	FB3 − 6009 − 000		1	SHEET マイラ	
32	WT2 − 5218 − 000		21	CLAMP, CABLE ロッキング ワイヤ サドル	CLC900/CLC920 100V
501	XB1 − 2400 − 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XD2 − 1100 − 402		2	RING,E E リング	
503	XB1 − 2400 − 509		4	SCREW,MACH.,TRUSS HEAD,M4X5 バインド ネジ	

FIGURE 102 MACHINE FRONT PLATE 2
本体前側板（2）


33
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(J114)
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(J140)
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501
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(SW2)
(J135)
(SW1)
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220V PFE
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(J2)
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36
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502
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(PS35)
(J14)
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504
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42
(J134)
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(UN35)
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(SW3)
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(J106)
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(J104)
(FM9)
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(J42)
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(PS36)
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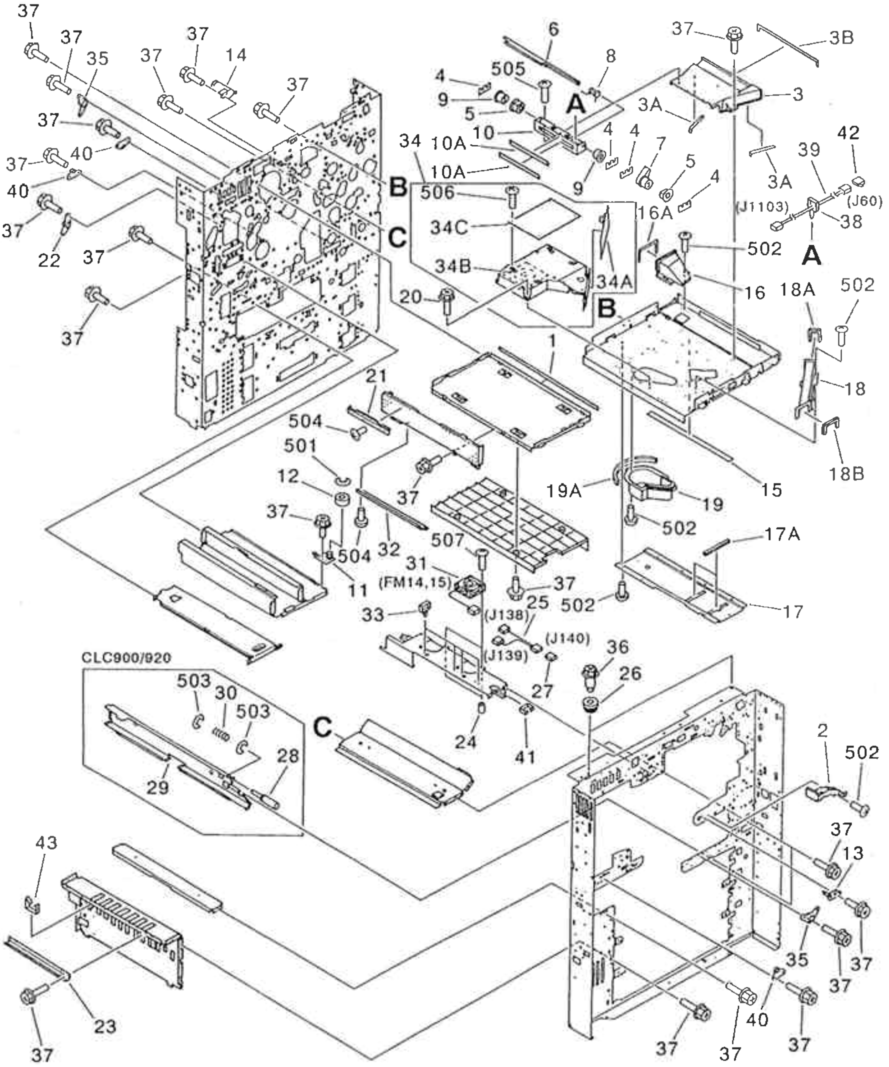
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
102 –	NPN		RF	MACHINE FRONT PLATE 2 ホンタイ マエ ソクバン (2)	
1	FF5 – 2195 – 000		1	HINGE, DOOR, LEFT, UPPER ドア ヒンジ (ヒダリ ウエ)	
2	FF5 – 2197 – 000		1	HINGE, DOOR, RIGHT, UPPER ドア ヒンジ (ミギ ウエ)	
3	FC1 – 6853 – 000		2	SCREW, M4X35 P タイト ネジ	
4	FH4 – 5121 – 000		1	SENSOR, RHV – 135 センサ	UN35
5	FF5 – 4029 – 000		1	HOUSING, DOOR SWITCH, LEFT ドアスイッチ バコ (ヒダリ)	
6	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS36 J104
7	FS5 – 2579 – 000		1	SPRING, TENSION ヒッパリ バネ	
8	VT2 – 0001 – 004		3	SUPPORT, PCB ロッキング サポート	
9	WC8 – 5051 – 000		1	SWITCH, PUSH プッシュ スイッチ	SW3
10	X71 – 3186 – 000		1	CATCH, DOOR ドア キャッチ	
11	FG5 – 3119 – 000		1	LEFT DOOR SWITCH CABLE ASS'Y ヒダリドア スイッチ ソクセン	J104,106
12	FB2 – 1405 – 000		1	LEVER, LEFT レバー (ヒダリ)	
13	FB2 – 1403 – 000		1	MOUNT, SWITCH スイッチ ダイ	
14	FB2 – 1406 – 000		1	PLATE, SHUTTER LINK シャッタ リンク バン	
15	FB2 – 1450 – 000		1	PLATE, BLANKING チェッカー フタ	
16	FC2 – 3085 – 000		1	SEAL シール	220V PFE
17	FG5 – 3122 – 000		1	MAIN SWITCH CABLE ASSEMBLY メイン スイッチ ソクセン	SW2 J135
18	FH7 – 6209 – 000		1	SWITCH スイッチ	SW1
19	XA9 – 0629 – 000		2	SCREW,RS,M4X8 RS タイト ネジ	
20	XZ9 – 0240 – 000		1	CATCH, MAGNET マグネット キヤツチ	
21	FF5 – 2196 – 000		1	HINGE, DOOR, LEFT, LOWER ドア ヒンジ (ヒダリ シタ)	
22	FB2 – 1454 – 000		1	PLATE, HOLDER, LEFT, FRONT トッテ コテイ バン (マエ ヒダリ)	
23	FB2 – 1455 – 000		1	PLATE, HOLDER, RIGHT, FRONT トッテ コテイ バン (マエ ミギ)	
24	FB2 – 1453 – 000		2	HANDLE トッテ	
25	FB2 – 1330 – 000		1	DUCT, I/P I/P ダクト	
26	FB2 – 9931 – 020		2	SPRING, GROUNDING アース バネ	
27	FB2 – 1402 – 000		1	LEVER, RIGHT レバー (ミギ)	
28	FS5 – 8835 – 000		1	LABEL, "LASER CAUTION 2" レーザ チュウイ ラベル 2	100/115/120V
	FS5 – 8836 – 000		1	LABEL, "LASER CAUTION 2" レーザ チュウイ ラベル 2	220/240V

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
102 – 29	FS5 – 2633 – 000		1	SPRING, TENSION ヒッパリ バネ	
30	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS35 J14
31	FB2 – 2582 – 000		1	COVER, HOPPER, UPPER ホッパ ウエ カバー	
32	FG5 – 3118 – 000		1	RIGHT DOOR SWITCH CABLE ASS'Y ミギドア スイッチ ソクセン	J14,134
33	XA9 – 0724 – 000		AR	SCREW,RS,M3X8 RS タイト ネジ	
34	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J114
35	VT2 – 0002 – 004		1	SPACER, SUPPORT サポート スペーサ	
36	FG5 – 3100 – 000		1	MAIN SWITCH AC CABLE ASSEMBLY メイン スイッチ AC ソクセン	100/115/120V J2
	FG5 – 3101 – 000		1	MAIN SWITCH AC CABLE ASSEMBLY メイン スイッチ AC ソクセン	220/240V J2
37	RH7 – 1126 – 000		1	FAN, DC24V ファン	FM9 J42
38	WT2 – 5026 – 000		1	CLIP, CABLE クランプ	
39	WT2 – 5011 – 000		3	CLIP, CABLE エッジ サドル	
40	WT2 – 5018 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
41	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J137
42	VS1 – 5057 – 003		3	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J42,106,134
43	XZ9 – 0240 – 000		1	CATCH, MAGNET マグネット キャツチ	
44	WT2 – 0494 – 000		16	CLAMP, CABLE ソクセン オサエ	
45	WT2 – 5031 – 000		1	CLIP, CABLE エッジ サドル	
46	WT2 – 5062 – 000		2	BUSHING, SQUARE スクエア ブッシュ	
47	VS1 – 5057 – 004		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J140
48	FG5 – 3064 – 000		1	ENV. MEASURING PCB ASSEMBLY カンキョウ ソクテイ カイロ キバン	
49	WT2 – 5031 – 000		1	CLIP, CABLE エッジ サドル	
501	XB4 – 6300 – 609		2	SCREW,TAPPING,PAN HEAD,M3X6 ナベ タッピン ネジ	
502	XD2 – 1100 – 402		3	RING,E E リング	
503	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
504	XB1 – 2400 – 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
505	XB1 – 2400 – 809		AR	SCREW,MACH.,TRUSS HEAD,M4X8 バインド ネジ	

FIGURE 103 MACHINE INTERNAL COMPONENTS 1

本体機械内部（1）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39
3A
(J60)
(J1103)
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34C
34B
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502
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18A
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B
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18B
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21
504
501
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37
37
32
504
11
19A
19
502
17A
507
31
(FM14,15)
37
25
502
17
33
(J138)
(J140)
(J139)
36
26
27
CLC900/920
503
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503
28
29
C
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NOTE : The assemblies with key No. 34 and 34B include the part shown in Figure 965-4.

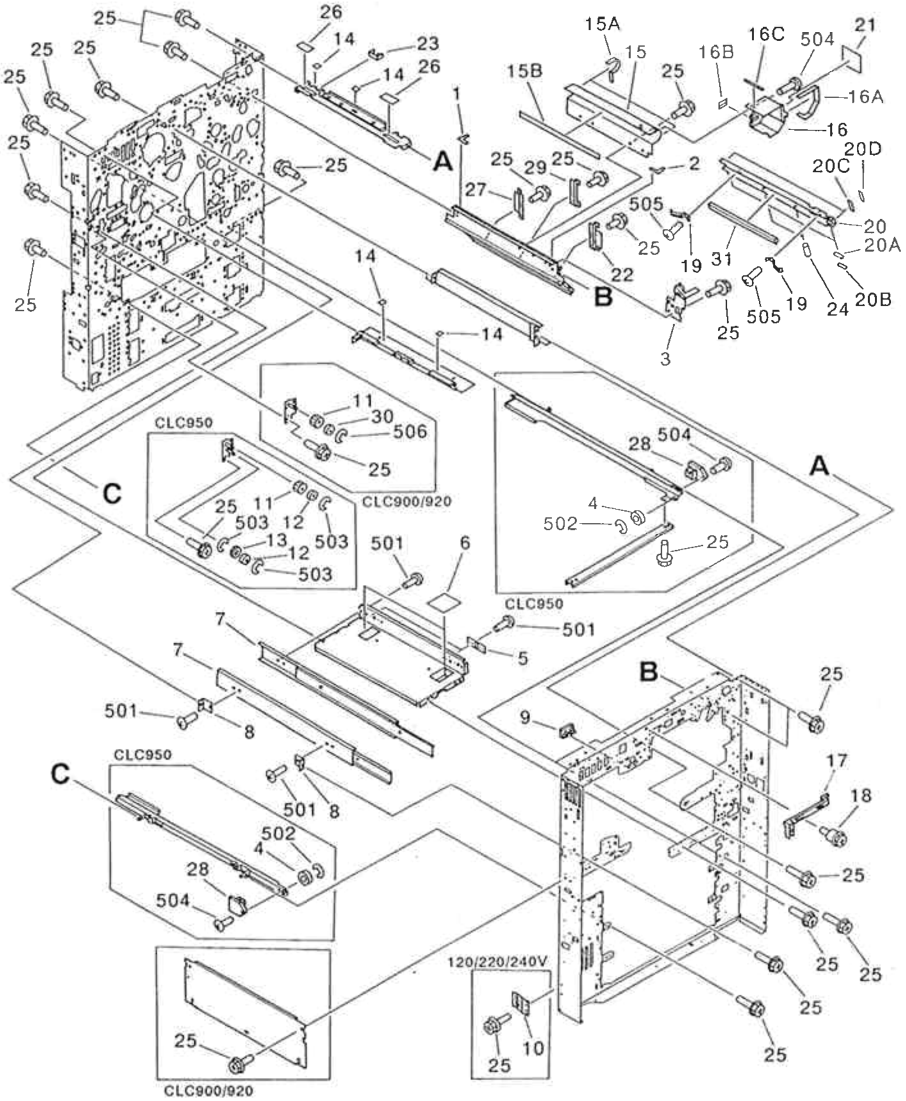
注 ： Key No. 34および34Bに記載の部番はFigure 965-4の部品を含みます。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
103 –	NPN		RF	MACHINE INTERNAL COMPONENTS 1 ホンタイ キカイ ナイブ (1)	
1	FB2 - 0081 - 000		1	SEAL, CROSSMEMBER ヒダリ ウエ ステイ シール	100/120V
	FB3 - 1149 - 000		1	SEAL, CROSSMEMBER ヒダリ ウエ ステイ シール	115/220/240V
2	FB3 - 6008 - 000		1	PLATE, TONER トナー ウケ	
3	FF5 - 2025 - 000		1	COVER, OPTICAL UNIT コウガク カバー	
3A	FB2 - 0178 - 000		2	SEAL, DUCT, LOWER ダクト シール (シタ)	
3B	FB2 - 1381 - 000		1	SEAL, OPTICAL DUCT コウガク ダクト シール	
4	FA2 - 8361 - 000		4	RETAINER キンテイ	
5	FA5 - 8743 - 000		2	BUSHING ブッシング	
6	FB2 - 0206 - 000		1	SHUTTER シャッタ	
7	FB2 - 0208 - 000		1	COLLAR, FRONT マエ カラー	
8	FB2 - 0209 - 000		1	SPRING, TORSION ネジリ バネ	
9	FB2 - 1382 - 000		2	COLLAR カラー	
10	FF5 - 2024 - 000		1	MOUNT, SHUTTER シャッタ ダイ	
10A	FB2 - 0211 - 000		2	SEAL, LIGHT BLOCKING シャコウ シール	
11	FF5 - 4058 - 000		1	STOP, HOUSING ワク タイ ストッパ	
12	FS5 - 6359 - 000		1	BEARING, BALL ボール ベアリング	
13	FF2 - 4822 - 000		2	PIN イチギメ ピン	
14	FB2 - 1464 - 000		1	SUPPORT, SHUTTER シャッタ ウケ	
15	FB3 - 1416 - 000		1	SEAL, KIT キット シール	
16	FF5 - 2015 - 000		1	DUCT, PRIMARY 1ジ ダクト	
16A	FB2 - 0205 - 000		1	SEAL, PRIMARY DUCT 1ジ ダクト シール	
17	FF5 - 2020 - 000		1	PLATE, REINFORCEMENT ステイ ホキョウ バン	
17A	FB2 - 0200 - 000		2	SEAL, REINFORCEMENT PLATE ホキョウ バン シール	
18	FF5 - 2021 - 000		1	GUIDE, CHECK チェック ガイド	
18A	FB2 - 0202 - 000		1	SEAL, CHECK GUIDE, FRONT ガイド シール (マエ)	
18B	FB2 - 0203 - 000		1	SEAL, CHECK GUIDE, REAR ガイド シール (ウシロ)	
19	FF5 - 4062 - 000	N	1	COVER, MOTOR モータ カバー	
19A	FB2 - 0199 - 000		1	SEAL, MOTOR COVER モータ カバー シール	
20	XA9 - 0722 - 000		4	SCREW,RS,M4X12 RS タイト ネジ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
103 – 21	FB3 – 1144 – 020		2	PLATE, GROUNDING アース バン	
22	FB2 – 6317 – 000		1	HOLDER, PIN, 3 ピン ホルダ (3)	
23	FB2 – 9929 – 000		1	PLATE, GROUNDING DCP アース バン	
24	XH9 – 0006 – 000		4	BUSH, RUBBER, (WITH M4 NUT) クワイタイト	
25	FG5 – 3124 – 000		1	CABLE, FAN FEED ハンソウ ファン ソクセン	J138 – 140
26	FB2 – 6310 – 000		3	BUSHING, RUBBER ゴム ブッシュ	
27	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J140
28	FB1 – 8652 – 000		1	SHAFT, SIDE REGISTRATION ヨコレジ ジク	CLC900/920
29	FB2 – 0936 – 020		1	RAIL, CASSETTE, RIGHT カセット レール (ミギ)	CLC900/920
30	FS5 – 2629 – 000		1	SPRING, COMPRESSION アッシュク バネ	CLC900/920
31	FH6 – 1024 – 000		2	FAN, DC24V ファン モータ	FM14,15 J138,139
32	FB2 – 4382 – 000		1	PLATE, GROUNDING アース バン	
33	WT2 – 0262 – 000		5	CLIP, CABLE ロッキング ワイヤ サドル	
34	FG5 – 7431 – 000		1	SCANNER ASSEMBLY スキャナ ブ	100/120V SEE NOTE
	FG5 – 7432 – 050		1	SCANNER ASSEMBLY スキャナ ブ	115/220/240V SEE NOTE
34A	FG5 – 5692 – 040		1	LASER UNIT レーザ ユニット	
34B	FY7 – 0317 – 000		1	SCANNER MOTOR ASSEMBLY スキャナ モータ ブ	
34C	FG5 – 3055 – 070		1	LASER DRIVER PCB ASSEMBLY レーザ ドライバ カイロ キバン	100/120V
	FG5 – 3244 – 070		1	LASER DRIVER PCB ASSEMBLY レーザ ドライバ カイロ キバン	115/220/240V
35	FB2 – 6315 – 000		2	HOLDER, PIN, 2 ピン ホルダ (2)	
36	FS5 – 9215 – 000		5	SCREW,STEPPED ダンビス	
37	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
38	WT2 – 0434 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
39	FG5 – 3116 – 000		1	CABLE, BEAM DETECTOR ビーム ディテクタ チュウケイ ソクセン	100/120V J60,1103
	FH2 – 6025 – 000		1	CABLE, BEAM DETECTOR ビーム ディテクタ チュウケイ ソクセン	115/220/240V J60,1103
40	FB2 – 6316 – 000		3	HOLDER, PIN, 1 ピン ホルダ (1)	
41	WT2 – 5011 – 000		1	CLIP, CABLE エッジ サドル	
42	VS1 – 5057 – 005		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J60
43	WT2 – 5056 – 000		1	CLIP, CABLE エッジ サドル	
501	XD2 – 1100 – 642		1	RING,E E リング	

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
103 –	502	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
	503	XD2 – 1100 – 502		2	RING,E E リング	CLC900/920
	504	XB1 – 2300 – 606		11	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
	505	XB1 – 2400 – 609		1	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
	506	XB1 – 2400 – 607		1	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
	507	XB1 – 2404 – 009		4	SCREW,MACH.,TRUSS HEAD,M4X40 バインド ネジ	

FIGURE 104 MACHINE INTERNAL COMPONENTS 2
本体機械内部（2）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A
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15A
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20D
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CLC900/920
CLC950
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CLC950
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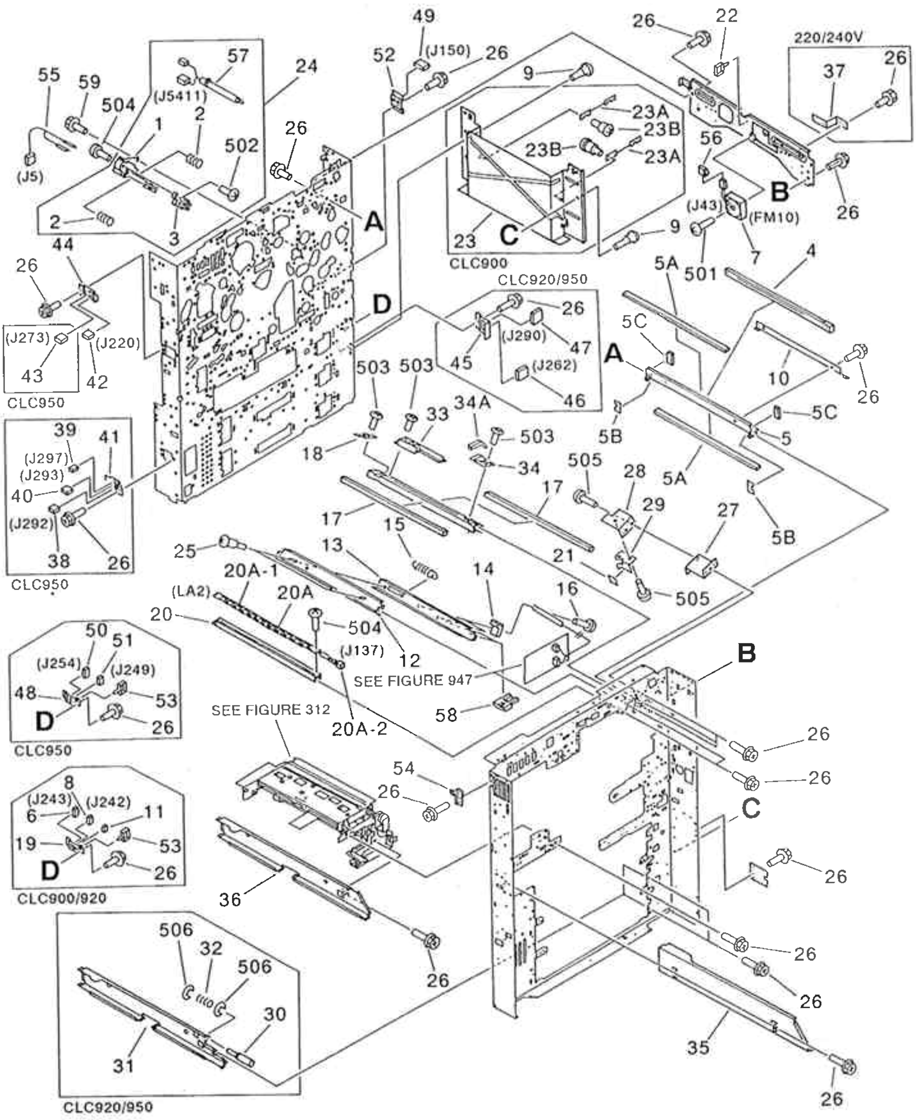
25
C
CLC950
502
4
28
504
25
CLC900/920
120/220/240V
10
25

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
104 –	NPN		RF	MACHINE INTERNAL COMPONENTS 2 ホンタイ キカイ ナイブ (2)	
1	FB2 – 0477 – 000		1	SEAL, RAIL, FRONT キットレール シール (マエ)	
2	FB2 – 0478 – 000		1	SEAL, RAIL, REAR キットレール シール (ウシロ)	
3	FG5 – 5698 – 000		1	BEAM DETECT ASSEMBLY ビーム ディテクタ ブ	
4	FS5 – 6254 – 000		2	ROLLER, RAIL レール コロ	CLC950
5	FB2 – 9029 – 000		2	PLATE, RAIL, RIGHT ミギ レール コテイバン (ミギ)	
6	FB3 – 8221 – 000		2	SHEET シート	
7	XZ9 – 0391 – 020		2	RAIL, HOUSING ワク レール	
8	FB2 – 0086 – 000		2	BRACKET レール コテイ バン	
9	FB2 – 0601 – 000		1	HOLDER, SLIDE ホルダ スライド	
10	FB3 – 1143 – 000		1	PLATE, GROUNDING アース バン	120/220/240V
11	FS3 – 0451 – 000		1	GEAR, 30T 30T ギア	
12	FS5 – 6253 – 000		2	ROLLER ツキアテ コロ	CLC950
13	FS1 – 0615 – 000		1	GEAR, 30T 30T ギア	CLC950
14	FH6 – 8349 – 000		4	DAMPER ダンパ	
15	FF5 – 2026 – 000	N	1	COVER, DUCT ダクト カバー	
15A	FB2 – 0122 – 000		2	SEAL, DUCT, REAR ダクト シール (ウシロ)	
15B	FB2 – 1446 – 000		1	SEAL, "DUCT UPPER" ダクト ウエ シール	
16	FF5 – 2208 – 000	N	1	BD COVER BD カバー	
16A	FB2 – 0121 – 000		1	SEAL, DUCT, FRONT ダクト シール (マエ)	
16B	FB2 – 1444 – 000		1	SEAL, CORD コード シール	
16C	FB2 – 1445 – 000		1	SEAL, UPPER ウエ シール	
17	FB2 – 0125 – 000		1	LINK, SHUTTER ACTUATING シャッタ リンク	
18	FS5 – 9210 – 000		2	SCREW,STEPPED,M4 ダンビス	
19	FB2 – 0191 – 000		2	PLATE, RETAINER ミラー オサエ バン	
20	FF5 – 3992 – 000		1	HOLDER, MIRROR ミラー ホルダ	
20A	FA5 – 0951 – 000		2	DAMPER, RUBBER ダンパ	
20B	FA5 – 0949 – 000		2	PLATE, DAMPER ダンパ オサエ	
20C	FB2 – 2817 – 000		2	DAMPER, S ダンパ (S)	
20D	FB3 – 2058 – 000		2	PLATE, DAMPER ダンパ オサエ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
104 – 21	FS5 – 8833 – 000		2	LABEL, "LASER CAUTION" レーザ チュウイ ラベル	100/115/120V
	FS5 – 8834 – 000		2	LABEL, "LASER CAUTION" レーザ チュウイ ラベル	220/240V
22	FB2 – 9193 – 000		1	PLATE, SUPPORT, FRONT Rコン シジバン (マエ)	
23	WT2 – 5086 – 000		4	HOLDER, EDGE エッジ ホルダ	
24	X31 – 6240 – 680		2	SETSCREW, M4X6 ロッカク アナツキ トメネジ	
25	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
26	FB2 – 9103 – 000		4	DAMPER, READER, 1 リーダ ダンパ (1)	
27	FB2 – 9195 – 000		1	PLATE, SUPPORT, REAR Rコン シジバン (ウシロ)	
28	FC1 – 4747 – 000		2	HOLDER, RAIL レール ストッパ	CLC950
29	FB2 – 9194 – 000		1	PLATE, SUPPORT, MIDDLE Rコン シジバン (ナカ)	
30	FS5 – 6253 – 000		1	ROLLER ツキアテ コロ	CLC900/920
31	FN5 – 4009 – 000		1	MIRROR, DIGITAL デジタル ミラー	
501	XB6 – 7400 – 609		AR	SCREW,TP,M4X6 TP ネジ	
502	XD2 – 1100 – 642		2	RING,E E リング	CLC950
503	XD2 – 1100 – 642		3	RING,E E リング	CLC950
504	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
505	XB6 – 7400 – 605		2	SCREW,TP,M4X6 TP ネジ	
506	XD2 – 1100 – 642		1	RING,E E リング	CLC900/920

FIGURE 105 MACHINE INTERNAL COMPONENTS 3
本体機械内部（3）


49
52
(J150)
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22
220/240V
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37
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59
504
57
(J5411)
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502
26
(J5)
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23A
23B
23B
23A
23
C
CLC900
9
56
(J43)
B
(FM10)
26
501
7
4
5A
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44
(J273)
(J220)
43
42
CLC950
D
CLC920/950
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45
(J290)
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(J262)
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5C
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5B
5C
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503
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34A
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5A
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5B
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41
(J297)
(J293)
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(J292)
38
26
CLC950
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20A-1
(LA2)
20A
20
14
21
505
16
504
(J137)
12
SEE FIGURE 947
58
50
51
(J254)
(J249)
48
53
D
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CLC950
SEE FIGURE 312
20A-2
B
26
26
C
54
26
8
(J243)
(J242)
6
11
19
53
D
26
CLC900/920
36
26
26
26
26
506
32
506
30
31
CLC920/950
35
26

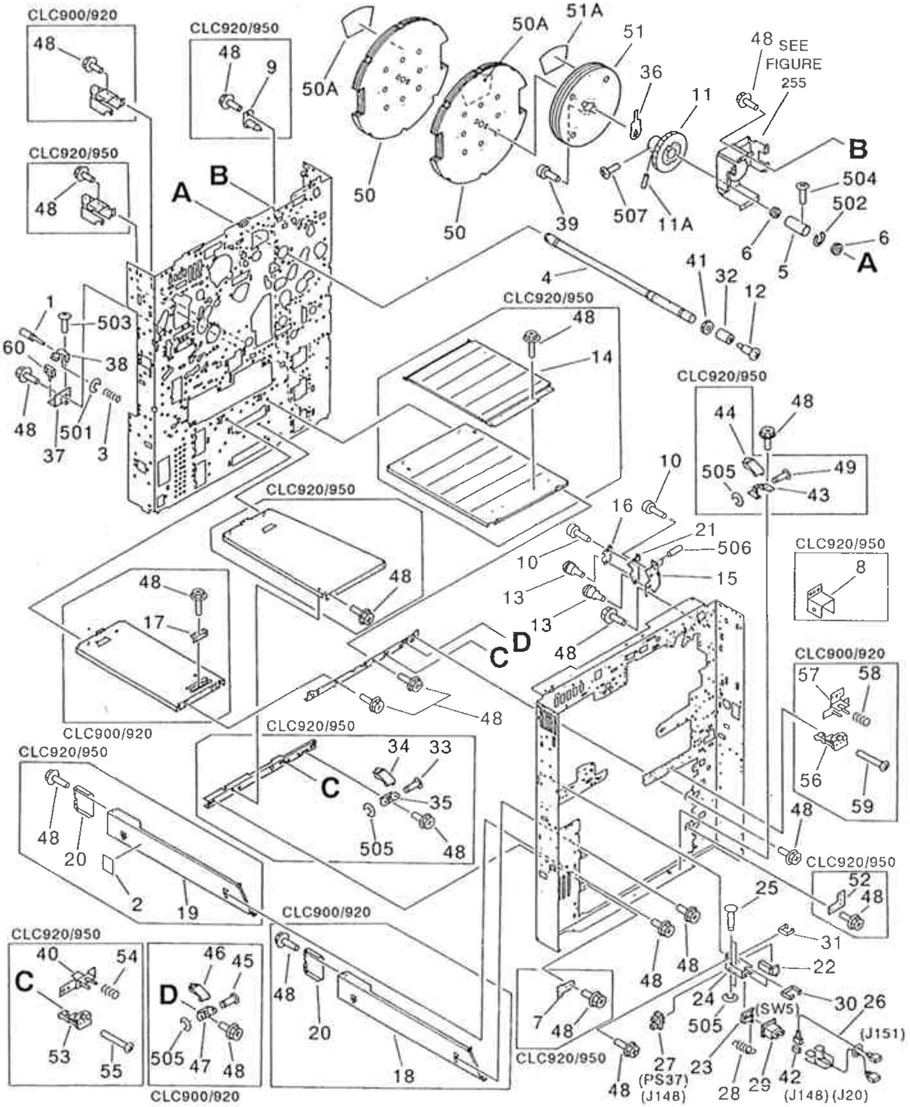
FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
105 –	NPN		RF	MACHINE INTERNAL COMPONENTS 3 ホンタイ キカイ ナイブ (3)	
1	FF5 – 2038 – 000		1	BRUSH シュウデン ブラシ	
2	FS2 – 2036 – 020		2	SPRING, COMPRESSION アッシュク バネ	
3	FB2 – 1458 – 000		1	CASE, BRUSH, 1 ブラシ ケース (1)	
4	FF5 – 2017 – 020		1	GLASS, DUST – PROOF ボウジン ガラス	
5	FF5 – 2023 – 000		1	RAIL, DUST – PROOF GLASS ボウジン ガラス レール	
5A	FB2 – 1387 – 000		2	SEAL, DUST – PROOF ボウジン シール	
5B	FB2 – 1388 – 000		2	SEAL, DUST – PROOF SIDE ボウジン サイド シール	
5C	FB2 – 1433 – 000		2	SEAL, DUST – PROOF, 1 ボウジン シール (2)	
6	VS1 – 5057 – 010		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920 J243
7	FH6 – 1024 – 000		1	FAN, DC24V ファン モータ	FM10 J43
8	VS1 – 5057 – 009		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920 J242
9	FS5 – 9221 – 000		2	SCREW, POSITIONING イチキメ ビス	
10	FB2 – 1386 – 000		1	PLATE, GLASS RETAINING ガラス オサエ バン	
11	VS1 – 5057 – 005		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
12	FB2 – 8966 – 000		1	PLATE, STOP コテイ シバン	
13	FB2 – 8967 – 000		1	PLATE, MOVABLE カドウ シバン	
14	FA3 – 0467 – 000		2	PLATE ホゴ イタ	
15	FS5 – 2634 – 000		1	SPRING, TENSION ヒツパリ バネ	
16	XA9 – 0040 – 000		2	SCREW,INSUL.,TRUSS HEAD,M4X20 ゼツエン ビス	
17	FB2 – 0488 – 000		2	SEAL, PRIMARY 1ジ シール	
18	FB2 – 0443 – 000		1	SPRING, LEAF イタ バネ	
19	FB3 – 5855 – 000		1	PLATE, MOUNT, CONNECTOR コネクタ バン (ナカ キュウシ)	CLC900/920
20	FG5 – 5635 – 000		1	PRE – CONDITIONING ASSEMBLY マエ ロコウ ブ	
20A	FG5 – 3181 – 000		1	FUSE LAMP ARRAY ASSEMBLY ヒューズ ランプ アレイ ブ	LA2 J137
20A – 1	FH7 – 3266 – 000		12	LAMP, PRE – CONDITIONING マエ ロコウ ランプ	
20A – 2	FG5 – 3182 – 000		1	CABLE, PRE – COND.LAMP マエ ロコウ ランプソクセン	J137
21	FB2 – 6292 – 000		1	SHEET, LIGHT BLOCKING シャコウ シート	
22	WT2 – 0434 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
23	FG5 – 2654 – 000		1	PICK – UP DOOR MOUNT ASSEMBLY キュウシ ドア ダイ ブ	CLC900

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
105 – 23A	FB1 – 7041 – 000		2	WIRE, DOOR SUPPORT ミギ トビラ ササエ ワイヤ	CLC900
23B	FS5 – 9221 – 000		2	SCREW, POSITIONING イチキメ ビス	CLC900
24	FG5 – 2615 – 040		1	BRUSH UNIT シュウデン ブラシ ユニット	100/115/120V
	FG5 – 9392 – 000		1	ELIMINATOR UNIT, STATIC – CHARGE シュウデン ブラシ ユニット	220/240V
25	FS5 – 9336 – 000		2	SCREW,STEPPED,M4 ダンビス	
26	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
27	FB2 – 0188 – 000		1	PLATE, MIRROR SUPPORT, 1 ミラー シジバン (1)	
28	FB2 – 0189 – 000		1	PLATE, MIRROR SUPPORT, 2 ミラー シジバン (2)	
29	FF5 – 2018 – 000		1	MIRROR, BEAM DETECT BD ミラー	
30	FB1 – 8652 – 000		2	SHAFT, SIDE REGISTRATION ヨコレジ ジク	CLC920/950
31	FB2 – 0936 – 020		2	RAIL, CASSETTE, RIGHT カセット レール (ミギ)	CLC920/950
32	FS5 – 2629 – 000		2	SPRING, COMPRESSION アッシュク バネ	CLC920/950
33	FF5 – 2344 – 000		1	FIN, PRIMARY, 1 1ジ フィン (1)	
34	FF5 – 2345 – 000		1	FIN, PRIMARY, 2 1ジ フィン (2)	
34A	FB2 – 0489 – 000		1	SEAL, PRIMARY, UPPER 1ジ シール (ウエ)	
35	FB2 – 6263 – 020		1	RAIL, CASSETTE, LEFT, UPPER カセット レール (ヒダリ ウエ)	
36	FB2 – 6262 – 020		1	RAIL, CASSETTE, RIGHT, UPPER カセット レール (ミギ ウエ)	
37	FB3 – 0891 – 000		1	STOP, SHIELD シールド オサエ	220/240V
38	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J292
39	VS1 – 5057 – 005		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J297
40	VS1 – 5057 – 009		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J293
41	FB2 – 4281 – 000		1	PLATE, MOUNT, CONNECTOR コネクタ バン (ハンテン)	CLC950
42	VS1 – 5057 – 004		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J220
43	VS1 – 5057 – 005		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J273
44	FB2 – 4280 – 000		1	PLATE, MOUNT, CONNECTOR コネクタ バン (ハイシ)	
45	FB2 – 4279 – 000		1	PLATE, MOUNT, CONNECTOR コネクタ バン (シタ キュウシ)	CLC920/950
46	VS1 – 5057 – 014		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950 J262
47	VS1 – 5057 – 015		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950 J290
48	FB2 – 4278 – 000		1	PLATE, MOUNT, CONNECTOR コネクタ バン (サイキュウシ)	CLC950
49	VS1 – 5057 – 011		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J150

FIGURE & KEY NO.		PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
105 –	50	VS1 – 5057 – 010		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J254
	51	VS1 – 5057 – 009		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J249
	52	FB2 – 4277 – 000		1	PLATE, MOUNT, CONNECTOR コネクタ バン (テサシ)	
	53	WT2 – 0317 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
	54	FB2 – 4444 – 000		1	PLATE, COPYBOARD ゲンコウ オキダイ トリツケ バン	
	55	FG5 – 3098 – 000		1	CABLE, DRUM ドラム ソクセン	J5
	56	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J43
	57	FG5 – 9390 – 020		1	FUSE UNIT, DRUM HEATER ドラム ヒータ ヒューズ	100/120V J5411
		FG5 – 9391 – 000		1	FUSE UNIT, DRUM HEATER ドラム ヒータ ヒューズ	115/220/240V J5411
	58	WT2 – 5326 – 000		2	SUPPORT, CLIP バンド コテイ ダイ	
	59	XA9 – 0630 – 000		AR	SCREW,RS,M4X10 RS タイト ネジ	
	501	XB1 – 2303 – 009		2	SCREW,MACH.,TRUSS HEAD,M3X30 バインド ネジ	
	502	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
	503	XB1 – 2400 – 609		4	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
	504	XB6 – 7400 – 605		AR	SCREW,TP,M4X6 TP ネジ	
	505	XB1 – 2400 – 609		3	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
	506	XD2 – 1100 – 502		4	RING,E E リング	CLC920/950

FIGURE 106

MACHINE INTERNAL COMPONENTS 4
本体機械内部（4）


CLC900/920
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CLC920/950
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CLC920/950
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39
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507
11A
48 SEE FIGURE 255
B
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502
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CLC920/950
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CLC920/950
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CLC920/950
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CLC900/920
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CLC900/920
CLC920/950
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CLC920/950
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(SW5)
(J151)
CLC900/920
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18
CLC920/950
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C
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D
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45
505
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48
CLC900/920
7
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CLC920/950
48
27
(PS37)
(J148)
23
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42
(J148) (J20)

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
106 –	NPN		RF	MACHINE INTERNAL COMPONENTS 4 ホンタイ キカイ ナイブ (4)	
1	FB1 – 8652 – 000		1	SHAFT, SIDE REGISTRATION ヨコレジ ジク	
2	FB3 – 0884 – 000		2	SHEET, CASSETTE RAIL カセット レール シート	CLC920/950 220/240V
3	FS5 – 2629 – 000		1	SPRING, COMPRESSION アッシュク バネ	
4	FB2 – 0445 – 000		1	SHAFT, DRUM ドラム ジク	
5	FB3 – 6023 – 000		1	SPACER, DRUM SHAFT ストッパ (ウシロ)	
6	XG9 – 0301 – 000		2	BEARING, ROLLER ローラ ベアリング	
7	FB2 – 9898 – 000		1	PLATE, CROSSMEMBER, LEFT シタステイ シバン (ヒダリ)	CLC920/950
8	FF5 – 2191 – 000		1	SUPPORT, HOOK フック シバン	CLC920/950
9	FF5 – 2153 – 000		1	PIN, POSITIONING イチギメ ピン	CLC920/950
10	FA9 – 2604 – 000		2	SET SCREW, M4X8 トメ ネジ	
11	FG5 – 3732 – 040		1	GEAR, 140T 140T ギア	
11A	XA9 – 0884 – 000		2	SETSCREW,M5X8 ロッカク アナツキ トメネジ	
12	FS5 – 9223 – 000		1	SCREW,STEPPED,M4 ダンビス	
13	FS2 – 9267 – 000		2	SCREW, STEPPED, M4 ダンビス	
14	FB2 – 0092 – 000	N	1	COVER カバー	CLC920/950
15	FB2 – 1391 – 000		1	MOUNT, ADJUSTING チョウセイ ダイ	
16	FB2 – 1390 – 000		1	PLATE, MIRROR ADJUSTING, 2 ミラー チョウセイ バン (2)	
17	FB2 – 0090 – 000		1	PLATE, STOP, HEATER ヒータ コテイ バン	CLC900/920
18	FB2 – 0937 – 020		1	RAIL, CASSETTE, LEFT カセット レール (ヒダリ)	CLC900/920
19	FB2 – 0937 – 020		2	RAIL, CASSETTE, LEFT カセット レール (ヒダリ)	CLC920/950
20	FB2 – 0939 – 000		2	COVER, RAIL, LEFT レール カバー (ヒダリ)	CLC900
	FB2 – 0939 – 000		4	COVER, RAIL, LEFT レール カバー (ヒダリ)	CLC920
	FB2 – 0939 – 000		3	COVER, RAIL, LEFT レール カバー (ヒダリ)	CLC950
21	FB2 – 1389 – 000		1	PLATE, MIRROR ADJUSTING, 1 ミラー チョウセイ バン (1)	
22	FB2 – 4430 – 000		1	LEVER, SWITCH スイッチ レバー	
23	FB2 – 4431 – 000		1	MOUNT, SWITCH スイッチ ダイ	
24	FB2 – 4432 – 000		1	BOX, SWITCH スイッチ ボックス	
25	FB2 – 8890 – 000		2	SHAFT, SWING ヨウドウ ジク	
26	FG5 – 3120 – 000		1	CABLE, DOOR SWITCH ハイシ ドア スイッチ ソクセン	J20,148,151

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
106 –	27	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS37 J148
	28	FS5 – 2601 – 000		1	SPRING, TENSION ヒッパリ バネ	
	29	WC8 – 5051 – 000		1	SWITCH, PUSH プッシュ スイッチ	SW5
	30	WT2 – 0136 – 000		2	CLIP, CABLE エッジ サドル	
	31	WT2 – 5035 – 000		1	CLIP, CABLE エッジ サドル	
	32	FB2 – 0446 – 000		1	STOP, FRONT マエ ストッパ	
	33	FA3 – 8719 – 000		1	ROD, SIDE サイド キセイ ジク	CLC920/950
	34	FB2 – 0957 – 010		1	LEVER, LIFTER RELEASE リフタ カイジョ レバー	CLC920/950
	35	FB1 – 7025 – 000		1	MOUNT, LEVER, UPPER レバー シダイ (ウエ)	CLC920/950
	36	FB3 – 1770 – 000		1	FLAG, SENSOR センサ フラグ	
	37	FB3 – 6005 – 000		1	SUPPORT, SHAFT, 1 ヨコレジ ジク ダイ (1)	
	38	FB3 – 6006 – 000		1	SUPPORT, SHAFT, 2 ヨコレジ ジク ダイ (2)	
	39	XA9 – 0796 – 000		6	SCREW,ALLEN HEAD,M5X10 ロッカク アナツキ ボルト	
	40	FF5 – 4082 – 000		2	MOUNT, ADJASTING PLATE チョウセイ ダイ	CLC920/950
	41	FA9 – 1780 – 000		1	NUT ナット	
	42	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J148
	43	FB2 – 0958 – 000		1	MOUNT, LEVER レバー シダイ	CLC920/950
	44	FB2 – 0957 – 010		1	LEVER, LIFTER RELEASE リフタ カイジョ レバー	CLC920/950
	45	FA3 – 8719 – 000		1	ROD, SIDE サイド キセイ ジク	CLC900/920
	46	FB2 – 0957 – 010		1	LEVER, LIFTER RELEASE リフタ カイジョ レバー	CLC900/920
	47	FB1 – 7025 – 000		1	MOUNT, LEVER, UPPER レバー シダイ (ウエ)	CLC900/920
	48	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
	49	FA3 – 8719 – 000		1	ROD, SIDE サイド キセイ ジク	CLC920/950
	50	FF5 – 2329 – 000		2	FLYWHEEL, LARGE フライホイール (ダイ)	EXCEPT CLC900 PFE
		FF3 – 1195 – 000		2	FLYWHEEL, LARGE フライホイール (ダイ)	CLC900 PFE
	50A	FS5 – 8799 – 000		1	LABEL, "WARNING, WEIGHT" ジュウリョウ チュウイ ラベル	EXCEPT CLC900 PFE
		FC2 – 3091 – 000		1	LABEL, "WARNING, WEIGHT" ジュウリョウ チュウイ ラベル	CLC900 PFE
	51	FF5 – 4055 – 000		1	FLYWHEEL, SMALL フライ ホイール (ショウ)	EXCEPT CLC900 PFE
		FF3 – 1197 – 000		1	FLYWHEEL, SMALL フライ ホイール (ショウ)	CLC900 PFE
	51A	FS5 – 8799 – 000		1	LABEL, "WARNING, WEIGHT" ジュウリョウ チュウイ ラベル	EXCEPT CLC900 PFE

FIGURE & KEY NO.		PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
106 –	51A	FC2 – 3091 – 000		1	LABEL, "WARNING, WEIGHT" ジュウリョウ チュウイ ラベル	CLC900 PFE
	52	FB2 – 9897 – 000		1	PLATE, CROSSMEMBER, RIGHT シタステイ シバン (ミギ)	CLC920/950
	53	FF5 – 3657 – 000		2	PLATE, ADJUSTING チョウセイ バン	CLC920/950
	54	FS6 – 2149 – 000		4	SPRING, COMPRESSION アッシュク バネ	CLC920/950
	55	XA9 – 0875 – 000		2	SCREW, M4X30 ナイロック ネジ	CLC920/950
	56	FF5 – 3657 – 000		1	PLATE, ADJUSTING チョウセイ バン	CLC900/920
	57	FB3 – 7676 – 000		1	MOUNT, ADJASTING PLATE チョウセイ ダイ	CLC900/920
	58	FS6 – 2149 – 000		2	SPRING, COMPRESSION アッシュク バネ	CLC900/920
	59	XA9 – 0875 – 000		1	SCREW, M4X30 ナイロック ネジ	CLC900/920
	60	WT2 – 5218 – 000		1	CLAMP, CABLE ロッキング ワイヤ サドル	
	501	XD2 – 1100 – 502		1	RING,E E リング	
	502	XD2 – 3100 – 252		1	RING,C,EXTERNAL Cガタ トメワ (ジクヨウ)	
	503	XB1 – 2400 – 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
	504	XB6 – 7400 – 809		1	SCREW,TP,M4X8 TP ネジ	
	505	XD2 – 1100 – 322		AR	RING,E E リング	
	506	XB6 – 2401 – 008		2	SETSCREW,M4X10 ロッカク アナツキ トメネジ	
	507	XB1 – 2400 – 809		AR	SCREW,MACH.,TRUSS HEAD,M4X8 バインド ネジ	

FIGURE 107 MACHINE REAR PLATE 1 (1/2)
本体後側板（1）（1/2）

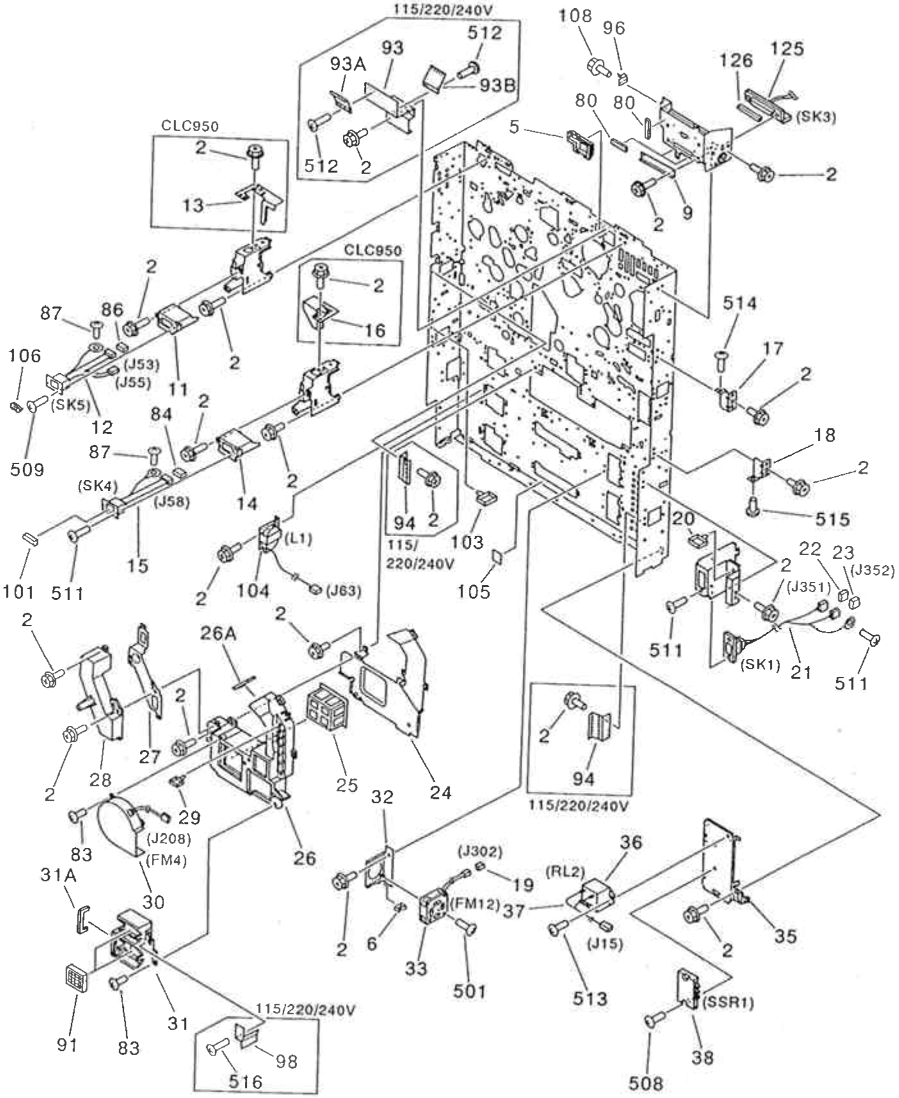

115/220/240V
512
93
93A
93B
512
2
108
96
126
125
(SK3)
80
80
5
2
9
2
CLC950
2
13
CLC950
2
16
2
87
86
2
106
(J53)
(J55)
11
2
(SK5)
12
509
84
2
87
(SK4)
(J58)
14
2
15
101
511
104
(L1)
(J63)
2
94
2
115/
220/240V
103
105
514
17
2
18
2
515
20
2
22
23
(J352)
(J351)
511
(SK1)
21
511
2
26A
2
2
27
28
2
25
24
2
29
83
(J208)
(FM4)
30
26
31A
91
83
31
115/220/240V
98
516
2
94
115/220/240V
32
(J302)
19
(FM12)
2
6
33
501
(RL2)
36
37
(J15)
513
2
35
(SSR1)
38
508

FIGURE 107 MACHINE REAR PLATE 1 ($^2/_2$)
本体後側板（1）（$^2/_2$）

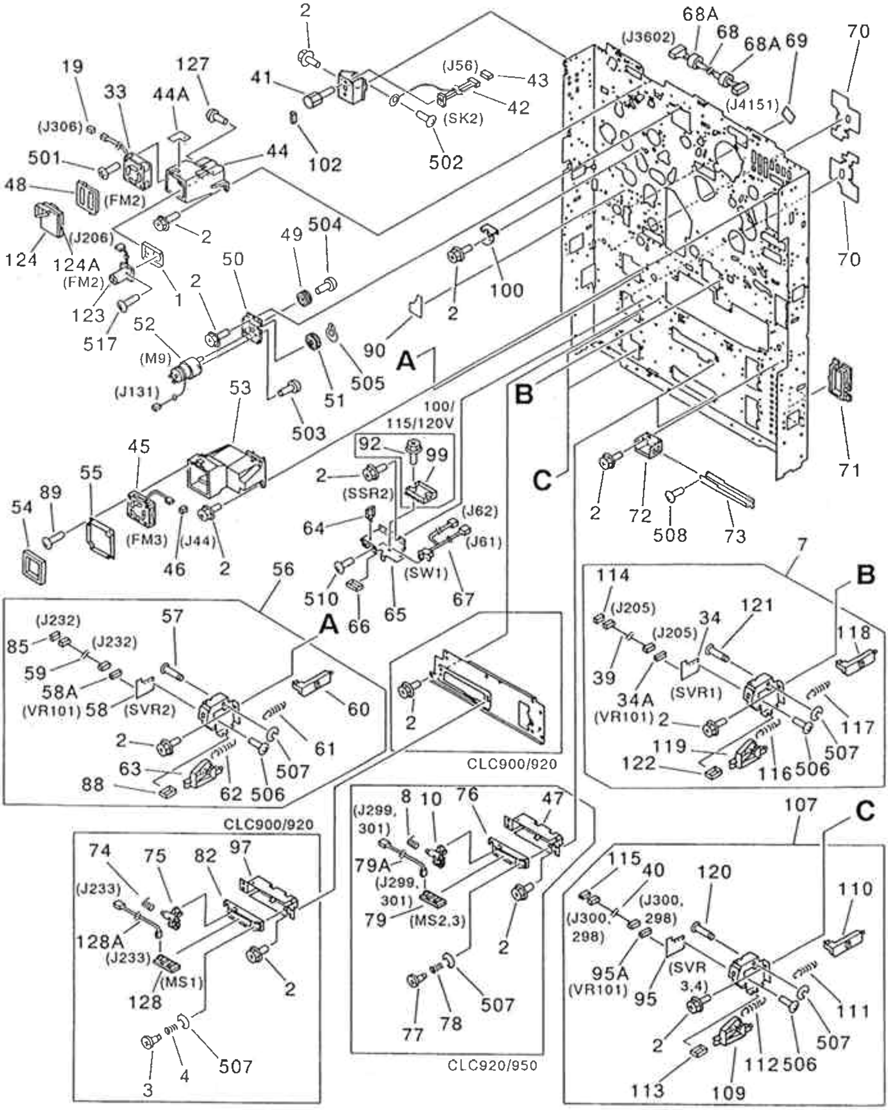

2
68A
(J3602)
68
68A
69
70
19
127
41
(J56)
43
33
44A
42
(J306)
(SK2)
(J4151)
501
44
102
502
48
(FM2)
(J206)
2
124
124A
(FM2)
49
504
50
2
100
1
70
123
2
2
517
52
(M9)
90
A
505
(J131)
51
53
B
503
100/
115/120V
92
99
C
45
2
(SSR2)
55
71
54
89
(J62)
64
(FM3)
(J44)
46
2
(J61)
2
72
508
73
(SW1)
510
67
65
66
56
7
B
114
(J205)
121
(J232)
57
A
(J205)
34
118
85
(J232)
39
59
58A
(VR101)
58
(SVR2)
60
34A
(SVR1)
(VR101)
2
117
2
61
2
119
507
63
507
122
116
506
88
62
506
CLC900/920
CLC900/920
8
10
76
47
107
C
(J299,
301)
74
75
82
97
79A
115
40
120
110
(J233)
(J299,
301)
(J300,
298)
79
(MS2,3)
(J300,
298)
128A
(J233)
2
95A
(VR101)
95
(SVR
3,4)
111
(MS1)
2
128
77
78
507
507
2
112
506
3
4
507
113
109
CLC920/950

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
107 –	NPN		RF	MACHINE REAR PLATE 1 ホンタイ ウシロ ソクバン (1)	
1	FF5 – 2351 – 000		1	PLATE, FAN ファン トリツケ ダイ	
2	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
3	FS2 – 9327 – 000		2	SCREW, STEPPED, M4 ダンビス	CLC900/920
4	FS3 – 2044 – 000		2	SPRING, COMPRESSION アッシュク バネ	CLC900/920
5	FB2 – 0107 – 000		1	CAP, CABLE, UPPER コード サドル (ウエ)	
6	WT2 – 5300 – 000		1	CLIP, CABLE エッジ サドル	
7	FG5 – 2664 – 000		1	SIDE SIZE SENSOR サイド サイズ ケンチ	
8	FB1 – 8737 – 000		2	SPRING, TORSION ネジリ バネ	CLC920/950
9	FB2 – 9903 – 000		1	COVER, IP IP フタ	
10	FB1 – 8735 – 000		2	ARM, SENSOR センサ アーム	CLC920/950
11	FB2 – 0261 – 000		1	MOUNT, CONNECTOR コネクタ ダイ	
12	FG5 – 3151 – 000		1	CABLE, RF SOCKET RF ソケット ソクセン	SK5 J53,55
13	FB2 – 6339 – 000		1	PLATE, SUPPORT ホジョ バン	CLC950
14	FB2 – 6265 – 000		1	PLATE, CONNECTOR MOUNTING, 2 コネクタ ダイ (2)	
15	FG5 – 3156 – 000		1	CABLE, EDITOR SOCKET エディタ ソケット ソクセン	SK4 J58
16	FB2 – 6338 – 000		1	PLATE, SUPPORT ホジョ バン	CLC950
17	FB2 – 0109 – 000		1	PLATE, SUPPORT, DC, UPPER DC シジバン (ウエ)	
18	FB2 – 0110 – 000		1	PLATE, SUPPORT, DC, LOWER DC シジバン (シタ)	
19	VS1 – 5057 – 002		2	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J302,306
20	WT2 – 5064 – 000		4	CLIP, CABLE ロッキング ワイヤ サドル	
21	FG5 – 3150 – 000		1	CABLE, SORTER SOCKET ソータ ソケット ソクセン	SK1 J351,352
22	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J351
23	VS1 – 5057 – 012		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J352
24	FB2 – 1323 – 000		1	MOUNT, DUCT OZONE オゾン ダクト ダイ	
25	FB2 – 4383 – 000		1	FILTER, TONER トナー フィルタ	
26	FF5 – 2057 – 000		1	DUCT, OZONE オゾン ダクト	
26A	FB2 – 1325 – 000		1	SEAL, OZONE DUCT オゾン ダクト シール	
27	FB2 – 1327 – 000		1	MOUNT, AUXILIALY DUCT ホジョ ダクト ダイ	
28	FB2 – 1326 – 000		1	DUCT, AUXILIALY ホジョ ダクト	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
107 – 29	WT2 – 0494 – 000		2	CLAMP, CABLE ソクセン オサエ	
30	FH6 – 1025 – 000		1	FAN, DC24V ファン	FM4 J208
31	FF5 – 2243 – 020		1	MOUNT, OZONE FILTER オゾン フィルタ ダイ	
31A	FB2 – 1325 – 000		1	SEAL, OZONE DUCT オゾン ダクト シール	
32	FB2 – 1340 – 000		1	PLATE, FAN SUPPORT ファン シジバン	
33	FH6 – 1024 – 000		2	FAN, DC24V ファン モータ	FM2,12 J306,302
34	FG5 – 1957 – 000		1	CASSETTE VR PCB ASSEMBLY カセット ボリューム カイロ キバン	SVR1
34A	VR9 – 5138 – 000		1	RESISTOR, VARIABLE, 10KOHM カヘン テイコウ	VR101
35	FB2 – 0131 – 000		1	MOUNT, AC DRIVER AC ドライバ ダイ	
36	FH7 – 6208 – 000		1	RELAY, AC250V リレー	RL2
37	FG5 – 3167 – 000		1	CABLE, CONNECTOR テイチャク リレー チュウケイ ソクセン	J15
38	FH4 – 5449 – 000		1	SSR SSR	100/115/120V SSR1
	FH4 – 5450 – 000		1	SSR SSR	220/240V SSR1
39	FG5 – 1947 – 000		1	CABLE, CASSETTE VR ボリューム ソクセン	J205
40	FG5 – 1947 – 000		2	CABLE, CASSETTE VR ボリューム ソクセン	CLC920/950 J300,298
41	WS9 – 0110 – 000		2	STOP, SCREW LOCK スクリュ ロック カナグ	
42	FG5 – 3152 – 000		1	CABLE, PROJECTOR SOCKET プロジェクタ ソケット ソクセン	SK2 J56
43	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J56
44	FF5 – 2377 – 000		1	DUCT 1ジ ダクト	
44A	FB3 – 1633 – 000		1	SHEET シート	
45	RH7 – 1126 – 000		1	FAN, DC24V ファン	FM3 J44
46	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J44
47	FB2 – 0941 – 000		2	MOUNT, SWITCH, REAR スイッチ ダイ (ウシロ)	CLC920/950
48	FF5 – 2379 – 000		1	FILTER, AIR エア フイルタ	
49	FS5 – 0667 – 000		1	GEAR, CAM カム ギア	
50	FF5 – 2030 – 000		1	MOUNT, RECIPROCATING MOTOR レシプロ モータ シバン	
51	FS5 – 0668 – 000		1	GEAR, 28T 28T ギア	
52	FH6 – 1017 – 000		1	MOTOR, DC モータ	M9 J131
53	FB2 – 1328 – 000		1	DUCT ハイキ ダクト	
54	FB2 – 4397 – 020		1	FILTER, AIR エア フィルタ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
107 – 55	FB2 – 8720 – 000		1	MOUNT, SUPPORT オゾン フィルタ シダイ	
56	FG5 – 2664 – 000		1	SIDE SIZE SENSOR サイド サイズ ケンチ	CLC900/920
57	FS5 – 7128 – 000		1	SHAFT シジ ジク	CLC900/920
58	FG5 – 1957 – 000		1	CASSETTE VR PCB ASSEMBLY カセット ボリューム カイロ キバン	CLC900/920 SVR2
58A	VR9 – 5138 – 000		1	RESISTOR, VARIABLE, 10KOHM カヘン テイコウ	CLC900/920 VR101
59	FG5 – 1947 – 000		1	CABLE, CASSETTE VR ボリューム ソクセン	CLC900/920 J232
60	FB1 – 8729 – 030		1	SHAFT, SLIDE スライド シャフト	CLC900/920
61	FS5 – 2323 – 020		1	SPRING, TENSION ヒッパリ バネ	CLC900/920
62	FS5 – 2322 – 000		1	SPRING, TENSION ヒッパリ バネ	CLC900/920
63	FB1 – 8727 – 000		1	HOLDER, CASSETTE VR PCB ボリューム ホルダ	CLC900/920
64	WT2 – 0494 – 000		1	CLAMP, CABLE ソクセン オサエ	
65	FB2 – 0101 – 000		1	GUIDE, CABLE, RIGHT チュウオウ タバセン ガイド (ミギ)	
66	WT2 – 5011 – 000		1	CLIP, CABLE エッジ サドル	
67	FG5 – 3172 – 000		1	CABLE, SWITCH スイッチ ソクセン	CLC900 100/115/120V CLC920 100V SW1 J61,62
	FG5 – 3173 – 000		1	CABLE, SWITCH スイッチ ソクセン	CLC900/920 220/240V SW1 J61,62
	FG5 – 3214 – 000		1	CABLE, SWITCH スイッチ ソクセン	CLC950 100/120V SW1 J61,62
	FG5 – 3215 – 000		1	CABLE, SWITCH スイッチ ソクセン	CLC950 220/240V SW1 J61,62
68	FF2 – 9068 – 000		1	CABLE, CPU CPU ケーブル	100/120V J3602,4151
68A	WE8 – 5101 – 000		2	CORE, FERRITE フェライト コア	100/120V
69	FB2 – 1447 – 000		4	SHEET, 1 ホゴ シート (1)	
70	FB2 – 1448 – 000		2	SHEET, 2 ホゴ シート (2)	
71	FB2 – 0105 – 000		1	CAP, COVER カバー キャップ	
72	FB2 – 1456 – 000		1	PLATE, HOLDER, LEFT, REAR トッテ コテイ バン (ウシロ ヒダリ)	
73	FB2 – 1453 – 000		1	HANDLE トッテ	
74	FB1 – 8737 – 000		1	SPRING, TORSION ネジリ バネ	CLC900/920
75	FB1 – 8735 – 000		1	ARM, SENSOR センサ アーム	CLC900/920
76	FB1 – 8733 – 000		2	HOLDER, SWITCH スイッチ ホルダ	CLC920/950
77	FS2 – 9327 – 000		4	SCREW, STEPPED, M4 ダンビス	CLC920/950
78	FS3 – 2044 – 000		4	SPRING, COMPRESSION アッシュク バネ	CLC920/950

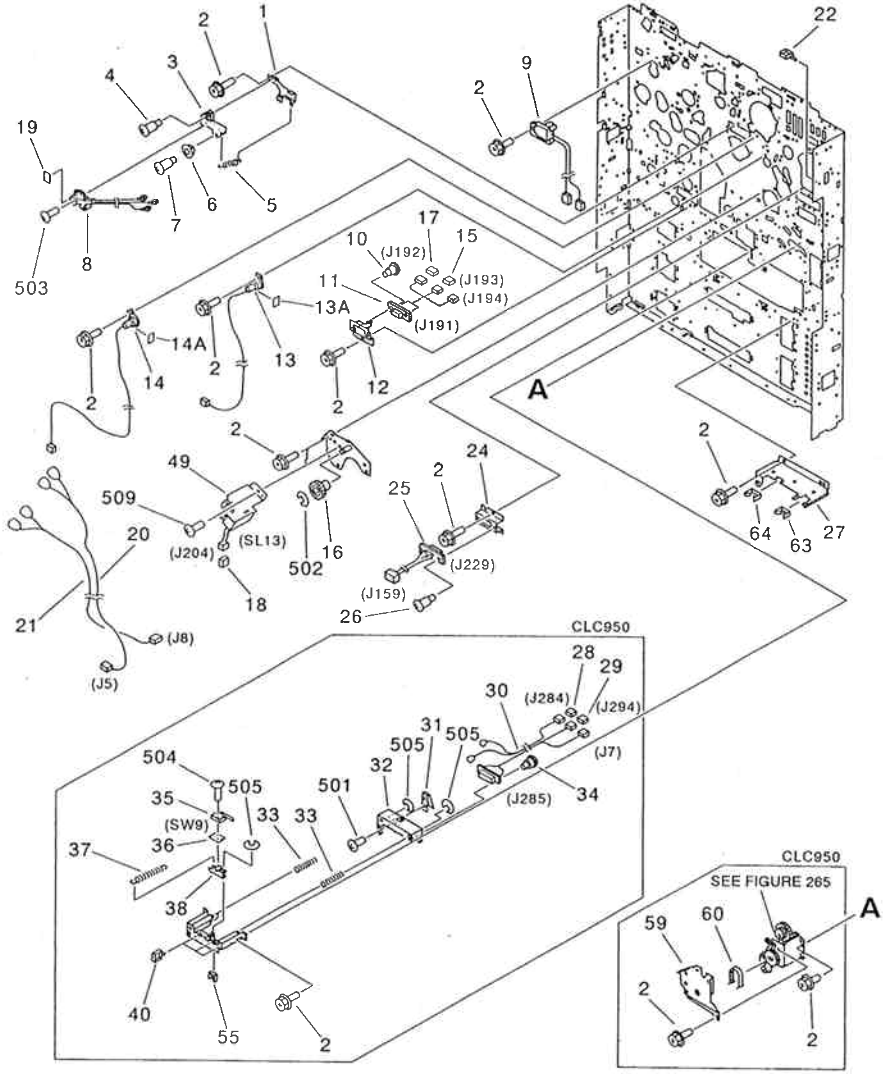
FIGURE & KEY NO.		PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
107 –	79	FG5 – 8338 – 000		2	CASSETTE SWITCH PCB ASSEMBLY カセット スイッチ カイロ キバン	CLC920/950 MS2,3
	79A	FG5 – 1948 – 000		2	CABLE, CASSETTE SWITCH カセット スイッチ ソクセン	CLC920/950 J299,311
	80	FB4 – 6249 – 000		3	GASKET ガスケット	
	81	FB2 – 4386 – 000		1	GROMMET, IP IP ケーブル クランプ	CLC900 100V
	82	FB1 – 8733 – 000		1	HOLDER, SWITCH スイッチ ホルダ	CLC900/920
	83	FA9 – 2753 – 000		5	SCREW,M4X10 P タイト ネジ	
	84	VS1 – 5057 – 012		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J58
	85	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920 J232
	86	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J53
	87	XA9 – 0633 – 000		2	SCREW,W/WASHER,M4X8 ザツキ ネジ	
	88	WT2 – 5011 – 000		1	CLIP, CABLE エッジ サドル	CLC900/920
	89	FC1 – 6853 – 000		2	SCREW, M4X35 P タイト ネジ	
	90	FB3 – 2060 – 000		1	SHEET, COVER アナフサギ シート	
	91	FB2 – 4396 – 020		2	FILTER, OZONE オゾン フイルタ	
	92	XA9 – 0791 – 000		2	SCREW,M4X17 ネジ	100/115/120V
	93	FG5 – 5688 – 000		1	MOUNT, COVER カバー ダイ	115/220/240V
	93A	FB3 – 1138 – 000		1	PLATE, GROUNDING, 1 アース バン (1)	115/220/240V
	93B	FB3 – 1139 – 000		1	PLATE, GROUNDING, 2 アース バン (2)	115/220/240V
	94	FB3 – 1142 – 000		2	PLATE, GROUNDING アース バン	115/220/240V
	95	FG5 – 1957 – 000		2	CASSETTE VR PCB ASSEMBLY カセット ボリューム カイロ キバン	CLC920/950 SVR3,4
	95A	VR9 – 5138 – 000		1	RESISTOR, VARIABLE, 10KOHM カヘン テイコウ	CLC920/950 VR101
	96	FB3 – 1404 – 000		1	PLATE, GROUNDING アース バン	
	97	FB2 – 0941 – 000		1	MOUNT, SWITCH, REAR スイッチ ダイ (ウシロ)	CLC900/920
	98	FB3 – 0886 – 000		1	COVER, HVT コウアツ カバー	115/220/240V
	99	FH4 – 5546 – 000		1	SSR SSR	100/115/120V SSR2
	100	FB2 – 9921 – 000		1	SUPPORT, SHAFT ドラム ジク コテイ カナグ	
	101	WT2 – 5304 – 000		1	CAP, DUST ダスト キャップ	
	102	WT2 – 5308 – 000		1	CAP, DUST ダスト キャップ	
	103	WT2 – 5220 – 000		8	CLAMP, CABLE ロッキング ワイヤ サドル	
	104	FG5 – 3922 – 000		1	SUB TRANSFORMER ASSEMBLY サブ トランス ダイ ブ	100V L1 J63

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
107 – 104	FG5 – 5371 – 000		1	SUB TRANSFORMER ASSEMBLY サブ トランス ダイ ブ	115/120V L1 J63
105	FB3 – 0885 – 000		1	SHEET, HVT HVT シート	
106	FH2 – 5824 – 000		1	COVER, CONNECTOR, 1 コネクタ カバー (1)	
107	FG5 – 2664 – 000		2	SIDE SIZE SENSOR サイド サイズ ケンチ	CLC920/950
108	XA9 – 0642 – 000		2	SCREW,RS,M3X6 RS タイト ネジ	
109	FB1 – 8727 – 000		2	HOLDER, CASSETTE VR PCB ボリューム ホルダ	CLC920/950
110	FB1 – 8729 – 030		2	SHAFT, SLIDE スライド シャフト	CLC920/950
111	FS5 – 2323 – 020		2	SPRING, TENSION ヒッパリ バネ	CLC920/950
112	FS5 – 2322 – 000		2	SPRING, TENSION ヒッパリ バネ	CLC920/950
113	WT2 – 5011 – 000		2	CLIP, CABLE エッジ サドル	CLC920/950
114	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J205
115	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950 J300,298
116	FS5 – 2322 – 000		1	SPRING, TENSION ヒッパリ バネ	
117	FS5 – 2323 – 020		1	SPRING, TENSION ヒッパリ バネ	
118	FB1 – 8729 – 030		1	SHAFT, SLIDE スライド シャフト	
119	FB1 – 8727 – 000		1	HOLDER, CASSETTE VR PCB ボリューム ホルダ	
120	FS5 – 7128 – 000		2	SHAFT シジ ジク	CLC920/950
121	FS5 – 7128 – 000		1	SHAFT シジ ジク	
122	WT2 – 5011 – 000		1	CLIP, CABLE エッジ サドル	
123	FH7 – 1615 – 000		1	FAN, 24DC, 0.22A 5.3W フアン	FM2 J206
124	FF5 – 2378 – 000		1	DUCT, PRIMARY, SMALL 1ジ ダクト (ショウ)	
124A	FB3 – 1422 – 000		1	SEAL, DUCT, 2 ダクト シール (2)	
125	FH2 – 6031 – 000		1	CABLE, IP/IF IP/IF ケーブル	SK3
126	WS9 – 0258 – 100		1	COVER, DUST ダスト カバー	
127	FA2 – 9388 – 000		3	SCREW,MACH.,TRUSS HEAD,M3X5 バインド ネジ	
128	FG5 – 8338 – 000		1	CASSETTE SWITCH PCB ASSEMBLY カセット スイッチ カイロ キバン	CLC900/920 MS1
128A	FG5 – 1948 – 000		1	CABLE, CASSETTE SWITCH カセット スイッチ ソクセン	CLC900/920 J233
501	XB1 – 2303 – 009		4	SCREW,MACH.,TRUSS HEAD,M3X30 バインド ネジ	
502	XB1 – 2400 – 606		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XB1 – 2300 – 507		3	SCREW,MACH.,TRUSS HEAD,M3X5 バインド ネジ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
107 – 504	XB6 – 7400 – 609		1	SCREW,TP,M4X6 TP ネジ	
505	XD2 – 2100 – 602		1	RING,GRIP グリップ リング	
506	XB4 – 7400 – 809		AR	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	
507	XD2 – 1100 – 502		AR	RING,E E リング	
508	XB2 – 8401 – 009		2	SCREW,W/WASHER,M4X10 バネツキ バインド ネジ	
509	XB1 – 2300 – 606		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
510	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
511	XB1 – 2300 – 606		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
512	XB1 – 2300 – 606		4	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	115/220/240V
513	XB1 – 2400 – 607		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
514	XB1 – 2401 – 007		1	SCREW,MACH.,TRUSS HEAD,M4X10 バインド ネジ	
515	XB1 – 2400 – 607		1	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
516	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
517	XB1 – 2300 – 809		2	SCREW,MACH.,TRUSS HEAD,M3X8 バインド ネジ	

FIGURE 108

MACHINE REAR PLATE 2 (1/2)
本体後側板（2）（1/2）



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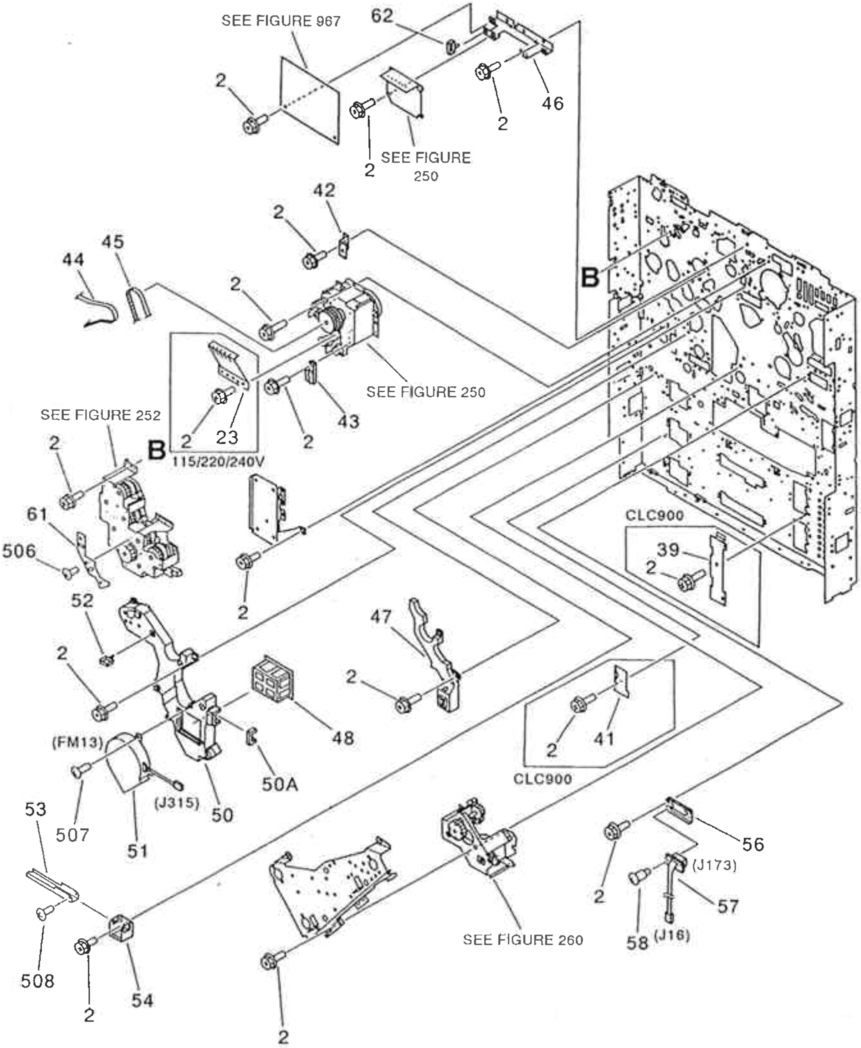
(J192)
(J193)
(J194)
(J191)
(J204)
(SL13)
(J229)
(J159)
(J8)
(J5)
(J284)
(J294)
(J7)
(J285)
(SW9)
A
CLC950
SEE FIGURE 265

FIGURE 108 MACHINE REAR PLATE 2 $(^{2}/_{2})$
本体後側板（2）$(^{2}/_{2})$


SEE FIGURE 967
62
2
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SEE FIGURE 250
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B
SEE FIGURE 250
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2
23
115/220/240V
SEE FIGURE 252
2
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506
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(FM13)
50A
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(J315)
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508
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CLC900
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2
CLC900
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(J173)
2
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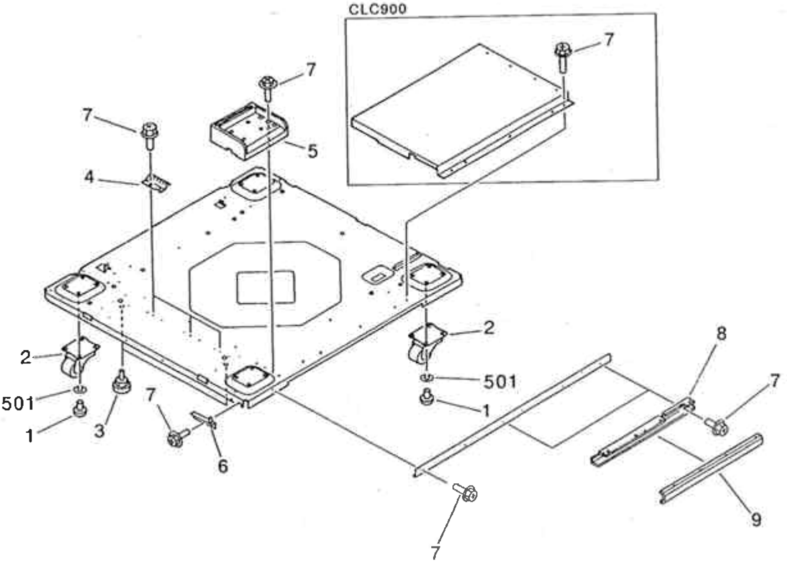
58
(J16)
SEE FIGURE 260
2

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
108 –	NPN		RF	MACHINE REAR PLATE 2 ホンタイ ウシロ ソクバン (2)	
1	FB2 – 0688 – 000		1	MOUNT, CONNECTOR コネクタ ダイ	
2	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
3	FB2 – 0687 – 000		1	PLATE, SUPPORT CONNECTOR コネクタ シバン	
4	FS1 – 9168 – 000		1	SCREW,STEPPED,M4X5 ダンビス	
5	FS5 – 2605 – 000		1	SPRING, TENSION ヒッパリ バネ	
6	FS1 – 1205 – 000		1	BUSHING ブッシング	
7	FS2 – 9001 – 000		1	SCREW,STEPPED,M4 ダン ビス	
8	FH2 – 9108 – 000		1	CABLE, HIGH VOLTAGE コウアツ ケーブル	
9	FH2 – 9107 – 000		1	CABLE, HIGH VOLTAGE, 1 コウアツ コード (1)	
10	FS5 – 9486 – 000		2	SCREW,STEPPED,M3X3.3 ダン ビス	
11	FG5 – 3140 – 000		1	CABLE, TRANSFER テンシャ ワク チュウケイ ソクセン	J191 – 194
12	FB2 – 1469 – 000		1	SUPPORT, CONNECTOR コネクタ シバン	
13	FF5 – 2381 – 030		1	CABLE, HIGH VOLTAGE, 2 コウアツ コード (2)	EXCEPT CLC900 PFE
	FF3 – 1198 – 030		1	CABLE, HIGH VOLTAGE, 2 コウアツ コード (2)	CLC900 PFE
13A	FS6 – 8078 – 000		1	LABEL, "CAUTION" チュウイ ラベル	EXCEPT CLC900 PFE
	FC2 – 3086 – 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	CLC900 PFE
14	FF5 – 2382 – 030		1	CABLE, HIGH VOLTAGE, 3 コウアツ コード (3)	EXCEPT CLC900 PFE
	FF3 – 1199 – 030		1	CABLE, HIGH VOLTAGE, 3 コウアツ コード (3)	CLC900 PFE
14A	FS6 – 8078 – 000		1	LABEL, "CAUTION" チュウイ ラベル	EXCEPT CLC900 PFE
	FC2 – 3086 – 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	CLC900 PFE
15	VS1 – 5057 – 015		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J193
16	FS5 – 0652 – 000		1	GEAR, 32T 32T ギア	
17	VS1 – 5057 – 014		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J192
18	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J204
19	ME1 – 0038 – 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	EXCEPT CLC900 PFE
	FC2 – 3083 – 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	CLC900 PFE
20	FF2 – 9072 – 000		1	CABLE, DEVELOPING BIAS, 1 ゲンゾウ バイアス ケーブル (1)	J5
21	FF2 – 9073 – 000		1	CABLE, DEVELOPING BIAS, 2 ゲンゾウ バイアス ケーブル (2)	J8
22	WT2 – 5221 – 000		3	CLAMP, CABLE ロッキング ワイヤ サドル	

FIGURE & KEY NO.		PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
108 –	23	FB3 – 1151 – 000		1	PLATE, GROUNDING, 1 アース バン (1)	115/220/240V
	24	FB2 – 1180 – 000		1	MOUNT, CONNECTOR コネクタ ダイ	
	25	FG5 – 2698 – 000		1	CABLE, FIXIMG テイチャク ソクセン	100V J159,229
		FG5 – 3107 – 000		1	CABLE, FIXING テイチャク ソクセン	115/120/220/240V J159,229
	26	FS5 – 9213 – 000		2	SCREW,STEPPED,M4X7 ダンビス	
	27	FB2 – 0102 – 000		1	GUIDE, CABLE, LEFT チュウオウ タバセン ガイド (ヒダリ)	
	28	VS1 – 5057 – 014		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J284
	29	VS1 – 5057 – 015		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J294
	30	FG5 – 3228 – 000		1	DUPLEXING DRAWER CABLE リョウメン ドロア ソクセン	CLC950 J7,284,285,294
	31	FC1 – 4970 – 000		1	PLATE, GROUNDING アース バン	CLC950
	32	FB2 – 1417 – 000		1	MOUNT, CONNECTOR コネクタ バン	CLC950
	33	FS5 – 2609 – 000		2	SPRING, COMPRESSION アッシュク バネ	CLC950
	34	RS5 – 9001 – 000		2	SCREW,STEPPED,M3 3 ダンビス	CLC950
	35	FH7 – 6237 – 000		1	MICROSWITCH マイクロスイッチ	CLC950 SW9
	36	FB2 – 6276 – 000		1	SHEET, INSULATION ゼツエン シート	CLC950
	37	FS5 – 2610 – 000		1	SPRING, TENSION ヒッパリ バネ	CLC950
	38	FB2 – 1419 – 000		1	MOUNT, SWITCH スイッチ ダイ	CLC950
	39	FB2 – 9900 – 030		1	COVER, REAR, LEFT ウシロ カバー (ヒダリ)	CLC900
	40	WT2 – 5018 – 000		3	CLIP, CABLE ロッキング ワイヤ サドル	CLC950
	41	FB2 – 9899 – 020		1	COVER, REAR, RIGHT ウシロ カバー (ミギ)	CLC900
	42	FB2 – 1465 – 000		1	PLATE, AUXILIARY ホジョ シバン	
	43	FB2 – 4269 – 000		1	PLATE, TRANSFER CLEANING テンシャ クドウ ホジョ バン	
	44	XF9 – 0460 – 000		1	BELT, TIMING タイミング ベルト	
	45	XF9 – 0461 – 000		1	BELT, TIMING タイミング ベルト	
	46	FB2 – 0103 – 000		1	PLATE, MOUNTING, UPPER ウエ キバン シジダイ	
	47	FB2 – 0112 – 000		1	DUCT, DEVELOPING ゲンゾウ ダクト	
	48	FB2 – 4383 – 000		1	FILTER, TONER トナー フィルタ	
	49	FG5 – 8303 – 000		1	TRANSFER DRUM SOLENOID ASS'Y テンシャ ドラム カアツ ソレノイド	SL13 J204
	50	FF5 – 2048 – 000		1	MAIN DUCT メイン ダクト	
	50A	FB2 – 0099 – 000		1	SEAL, DUCT, 1 メイン ダクト シール (1)	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
108 – 51	FH6 – 1025 – 000		1	FAN, DC24V ファン	FM13 J315
52	WT2 – 0494 – 000		4	CLAMP, CABLE ソクセン オサエ	
53	FB2 – 1453 – 000		1	HANDLE トッテ	
54	FB2 – 1457 – 000		1	PLATE, HOLDER, RIGHT, REAR トッテ コテイ バン (ウシロ ミギ)	
55	WT2 – 5011 – 000		1	CLIP, CABLE エッジ サドル	CLC950
56	FB2 – 0108 – 000		1	MOUNT, CONNECTOR テンシャ コネクタ シジ ダイ (R)	
57	FG5 – 3138 – 000		1	CABLE, DRUM, TRANSFER テンシャ ドラム チュウケイ ソクセン	J16,173
58	FS5 – 9213 – 000		2	SCREW,STEPPED,M4X7 ダンビス	
59	FF5 – 2277 – 020		1	SUPPORT, SHAFT シバン	CLC950
60	XF9 – 0553 – 000		1	BELT, TIMING タイミング ベルト	CLC950
61	FY1 – 1131 – 000		1	PLATE,DEVELOPING DRIVE SUPPORT ゲンゾウ クドウ ホキョウ バン	
62	WT2 – 5220 – 000		12	CLAMP, CABLE ロッキング ワイヤ サドル	
63	WT2 – 0491 – 000		1	CLIP, CABLE ソクセン オサエ	
64	WT2 – 5011 – 000		7	CLIP, CABLE エッジ サドル	
501	XB1 – 2300 – 609		3	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	CLC950
502	XD2 – 1100 – 642		1	RING,E E リング	
503	XB1 – 2400 – 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
504	XB1 – 2300 – 202		AR	SCREW,MACH.,TRUSS HEAD,M3X2 バインド ネジ	CLC950
505	XD2 – 1100 – 502		AR	RING,E E リング	CLC950
506	XB1 – 2300 – 409		4	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
507	XB4 – 7400 – 809		3	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	
508	XB1 – 2400 – 809		AR	SCREW,MACH.,TRUSS HEAD,M4X8 バインド ネジ	
509	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	

FIGURE 109 MACHINE BOTTOM PLATE
本体底板


CLC900
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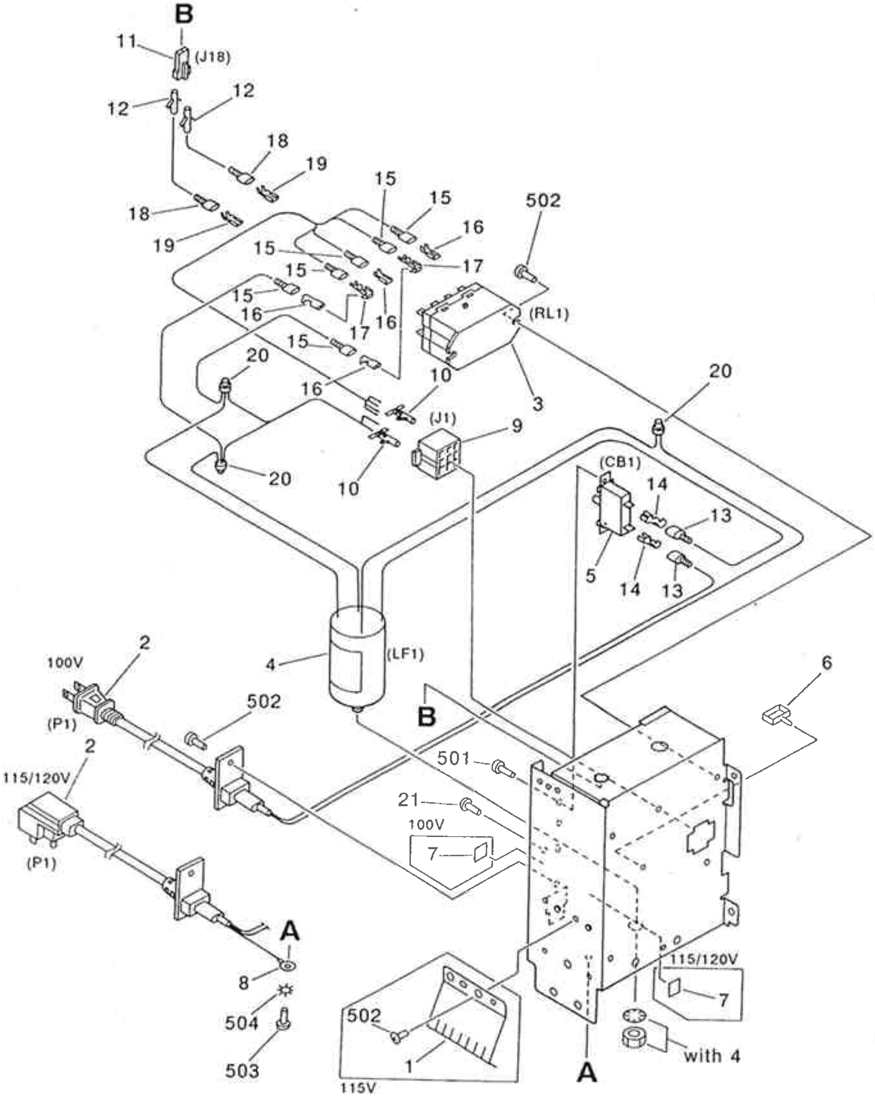
NOTE : The parts with key No. 8 and 9 are mounted when the CLC PS BOARD UNIT-A1 is installed.

注：Key No. 8, 9は、CLC PS ボード ユニット-A1 装置時に取付けます。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
109 –	NPN		RF	MACHINE BOTTOM PLATE ホンタイ ソコ イタ	
1	XA9 – 0790 – 000		16	SCREW,ALLEN,M8X8 ロッカク アナツキ ボタン ネジ M8X8	
2	XZ9 – 0367 – 000		4	CASTER キャスタ	
3	XZ9 – 0373 – 000		2	ADJUSTER アジャスタ	
4	FB2 – 9909 – 000		3	PLATE, GROUNDING アース バン	
5	FB2 – 1466 – 000		1	BASE, CONTAINER, WASTE TONER ハイトナー ベース	
6	FF5 – 2194 – 000		1	MOUNT, HINGE, LOWER ヒンジ ダイ (シタ)	
7	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
8	FB4 – 2744 – 000		2	GUIDE, CABLE, 1 ソクセン ガイド (1)	SEE NOTE
9	FB4 – 2746 – 000		2	GUIDE, CABLE, 2 ソクセン ガイド (2)	SEE NOTE
501	XD1 – 3100 – 809		16	WASHER,SPRING バネ ザガネ	

FIGURE 110 POWER CORD TERMINAL ASSEMBLY (100/115/120V)

電源コード台部（100／115／120V）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(RL1)
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16
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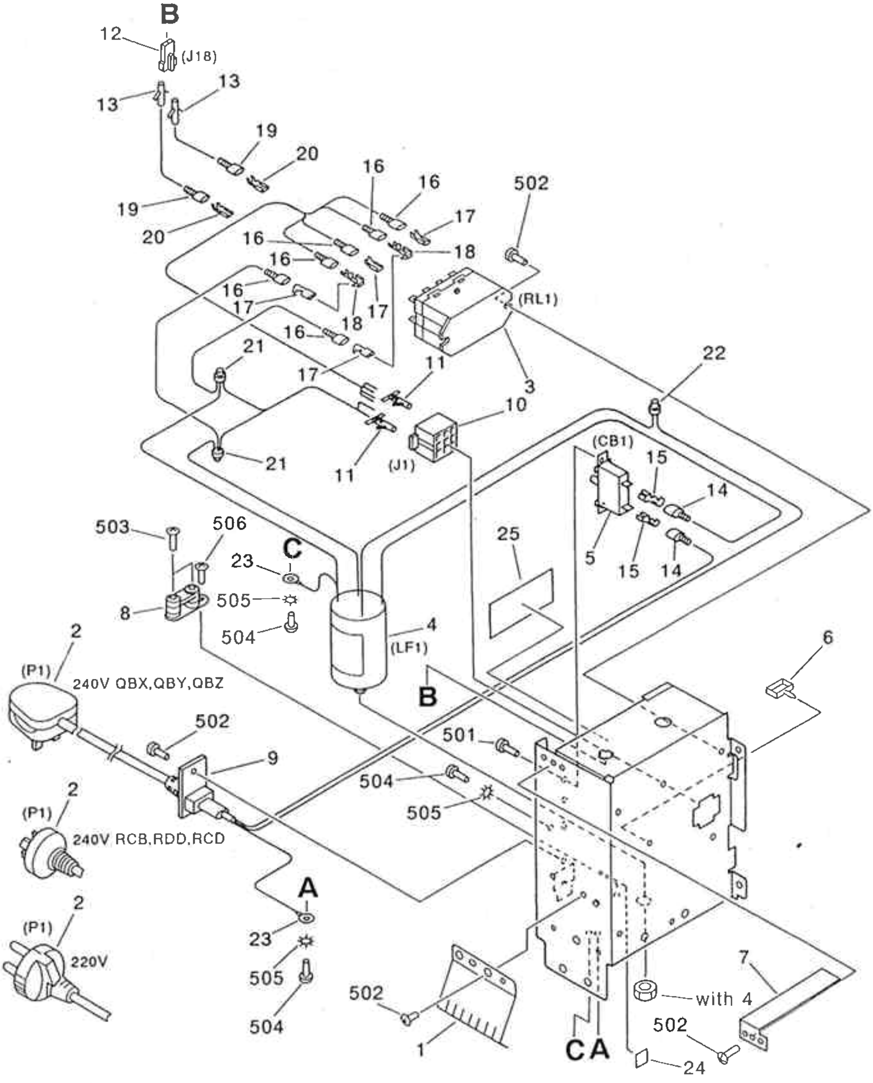
20
(J1)
9
20
10
(CB1)
14
13
5
14
13
2
100V
4
(LF1)
6
(P1)
502
B
2
115/120V
501
21
100V
7
(P1)
A
8
504
503
502
1
115V
A
115/120V
7
with 4

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
110 –	FG5 – 2549 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	100V
	FG6 – 0671 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	115V
	FG5 – 2719 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	120V
1	FB4 – 6246 – 000		1	PLATE, GROUNDING アース バン	115V
2	FH2 – 6027 – 000		1	CORD, POWER, 125V 15A デンゲン コード	100V P1
	FH2 – 5740 – 000		1	CORD, POWER, 300V 15A デンゲン コード	115/120V P1
3	FH7 – 6208 – 000		1	RELAY, AC250V リレー	RL1
4	FH7 – 9210 – 000		1	FILTER, NOISE ノイズ フィルタ	100/120V LF1
	FH7 – 9304 – 000		1	FILTER, NOISE ノイズ フィルタ	115V LF1
5	WD3 – 0104 – 000		1	BREAKER, CIRCUIT サーキット ブレーカ	CB1
6	WT2 – 0262 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
7	ME1 – 0009 – 000		1	LABEL, GROUNDING アース ラベル	
8	WT1 – 0580 – 000		1	TERMINAL, RING マルガタ タンシ	115/120V
9	VS3 – 0192 – 006		1	CONNECTOR, MALE コネクタ (オス)	J1
10	WS4 – 0073 – 000		6	SOCKET CONTACT, 14 – 20AWG ソケット コンタクト	
11	VS4 – 0002 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	J18
12	WS4 – 0217 – 000		2	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
13	WT1 – 5215 – 000		2	SLEEVE, FASTON ファストン スリーブ	
14	WT1 – 0143 – 000		2	SOCKET, FASTON 205, 14 – 18AWG ファストン	
15	WT1 – 9501 – 000		6	SLEEVE, FASTON ファストン スリーブ	
16	X62 – 5334 – 000		4	SOCKET, FASTON 250, 14 – 18AWG ファストン	
17	WT1 – 0146 – 000		2	SOCKET, FASTON 14 – 18AWG ファストン	
18	WT1 – 0029 – 000		2	SLEEVE, FASTON 250 ファストン スリーブ	
19	WT1 – 0017 – 000		2	SOCKET, FASTON 250, 16 – 20AWG ファストン	
20	WT1 – 0247 – 000		3	TERMINAL, END ヘイタン タンシ	
21	XA9 – 0265 – 000		1	SCREW, W/WASHER, TRUSS HEAD ザツキ バインド ネジ	
501	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XB1 – 2500 – 803		1	SCREW,MACH.,TRUSS HEAD,M5X8 バインド ネジ	115/120V
504	XD1 – 4100 – 502		1	WASHER,TOOTHED LOCK ハツキ ザガネ	115/120V

FIGURE 111

POWER CORD TERMINAL ASSEMBLY (220/240V)
電源コード台部（220／240V)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505
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(P1)
240V QBX,QBY,QBZ
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502
501
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504
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240V RCB,RDD,RCD
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(P1)
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220V
505
with 4
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502
502
504
1
C A
24

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
111 –	FG6 – 0674 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	220V PFW,PFE,PFG,SBB TBC,UDK
	FG5 – 2720 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	220V PFX,PFZ,PFT,SBC SBD,TBD,TBE,UDL,UDM
	FG6 – 0672 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	240V QBX
	FG5 – 2721 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	240V QBY,QBZ
	FG6 – 0673 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	240V RCB
	FG5 – 2722 – 000		1	POWER CORD TERMINAL ASSEMBLY デンゲン コード ダイ ブ	240V RCC,RCD
1	FB4 – 6246 – 000		1	PLATE, GROUNDING アース バン	
2	FH2 – 6028 – 000		1	CORD, POWER, 250V 10A デンゲン コード	220V P1
	FH2 – 6029 – 000		1	CORD, POWER, 250V 13A デンゲン コード	240V QBX,QBY,QBZ P1
	FH2 – 6030 – 000		1	CORD, POWER, 250V 10A デンゲン コード	240V RCB,RCC,RCD P1
3	FH7 – 6208 – 000		1	RELAY, AC250V リレー	RL1
4	FH7 – 9132 – 000		1	FILTER, NOISE ノイズ フィルタ	220V PFX,PFZ,PFT,SBC SBD,TBD,TBE,UDL,UDM 240V QBY,QBZ,RCC,RCD LF1
	FH7 – 9304 – 000		1	FILTER, NOISE ノイズ フィルタ	220V PFW,PFE,PFG,SBB TBC,UDK/240V QBX,RCB LF1
5	WD3 – 0125 – 000		1	BREAKER, CIRCUIT サーキット ブレーカ	CB1
6	WT2 – 0262 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
7	FB3 – 0887 – 000		1	COVER, MOUNT, POWER CORD コードダイ カバー	
8	FH2 – 5043 – 000		1	CLAMP, POWER CORD コード クリップ	
9	WT2 – 0113 – 000		1	GROMMET, POWER CORD グロメット	
10	VS3 – 0192 – 006		1	CONNECTOR, MALE コネクタ (オス)	J1
11	WS4 – 0073 – 000		6	SOCKET CONTACT, 14 – 20AWG ソケット コンタクト	
12	VS4 – 0002 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	J18
13	WS4 – 0217 – 000		2	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
14	WT1 – 5174 – 000		2	SLEEVE, FASTON, 187 ファストン スリーブ	
15	WT1 – 0015 – 000		2	SOCKET, FASTON 187, 16 – 20AWG ファストン	
16	WT1 – 9501 – 000		6	SLEEVE, FASTON ファストン スリーブ	
17	X62 – 5334 – 000		4	SOCKET, FASTON 250, 14 – 18AWG ファストン	220V PFX,PFZ,PFT,SBC SBD,TBD,TBE,UDL,UDM 240V QBY,QBZ,RCC,RCD 220V PFW,PFE,PFG,SBB TBC,UDK/240V QBX,RCB

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
111 – 18	WT1 – 0146 – 000		2	SOCKET, FASTON 14 – 18AWG ファストン	
19	WT1 – 0029 – 000		2	SLEEVE, FASTON 250 ファストン スリーブ	
20	WT1 – 0017 – 000		2	SOCKET, FASTON 250, 16 – 20AWG ファストン	
21	WT1 – 0247 – 000		2	TERMINAL, END ヘイタン タンシ	
22	WT1 – 0210 – 000		1	SPLICE, CLOSED END ヘイタン タンシ	
23	WT1 – 0580 – 000		2	TERMINAL, RING マルガタ タンシ	220V PFX,PFZ,PFT,SBC SBD,BD,TBE,UDL,UDM 240V QBY,QBZ,RCC,RCD
	WT1 – 0580 – 000		1	TERMINAL, RING マルガタ タンシ	220V PFW,PFE,PFG,SBB TBC,UDK/240V QBX,RCB
24	ME1 – 0009 – 000		1	LABEL, GROUNDING アース ラベル	
25	ME1 – 0022 – 000		1	LABEL, "GROUNDING" アース セツゾク チュウイ ラベル	220V PFW,PFX,PFZ UDK,UDL,UDM
501	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XB1 – 2402 – 509		2	SCREW,MACH.,TRUSS HEAD,M4X25 バインド ネジ	
504	XB1 – 2500 – 803		3	SCREW,MACH.,TRUSS HEAD,M5X8 バインド ネジ	220V PFX,PFZ,PFT,SBC SBD,TBD,TBE,UDL,UDM 240V QBY,QBZ,RCC,RCD
	XB1 – 2500 – 803		1	SCREW,MACH.,TRUSS HEAD,M5X8 バインド ネジ	220V PFW,PFE,PFG,SBB TBC,UDK/240V QBX,RCB
505	XD1 – 4100 – 502		3	WASHER,TOOTHED LOCK ハツキ ザガネ	220V PFX,PFZ,PFT,SBC SBD,TBD,TBE,UDL,UDM 240V QBY,QBZ,RCC,RCD
	XD1 – 4100 – 502		1	WASHER,TOOTHED LOCK ハツキ ザガネ	220V PFW,PFE,PFG,SBB TBC,UDK/240V QBX,RCB
506	XB1 – 2401 – 009		1	SCREW,MACH.,TRUSS HEAD,M4X10 バインド ネジ	

FIGURE 120 PAPER PICK-UP DOOR ASSEMBLY
給紙ドア部

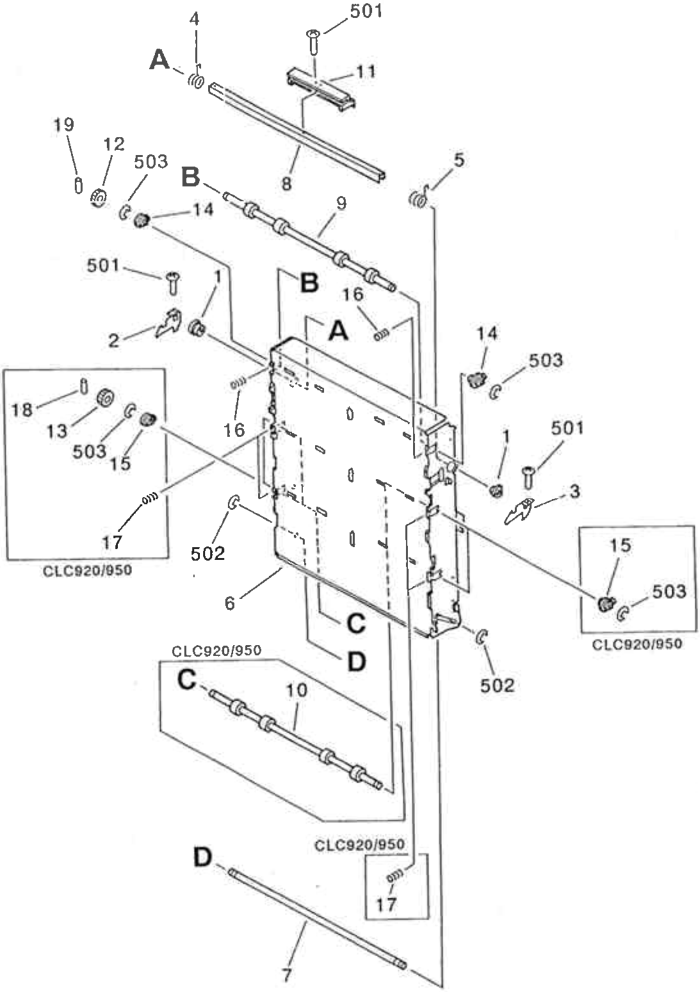
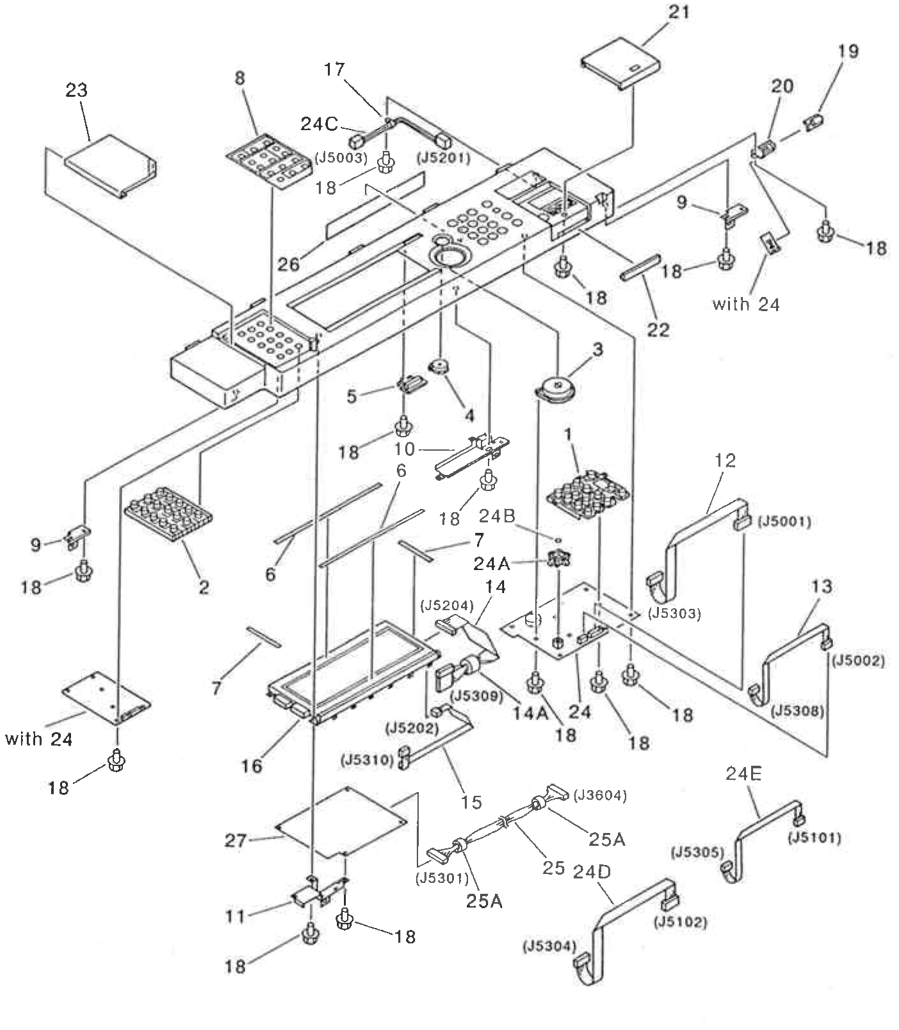

4
501
A
11
8
19
12
503
B
9
5
14
501
1
B
16
A
2
14
503
18
13
503
15
16
501
1
3
17
502
CLC920/950
6
15
503
CLC920/950
C
D
502
CLC920/950
C
10
CLC920/950
D
17
7

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
120 –	FG5 – 2652 – 000		1	PAPER PICK – UP DOOR ASSEMBLY キュウシ ドア ブ	CLC900
	FG5 – 2653 – 000		1	PAPER PICK – UP DOOR ASSEMBLY キュウシ ドア ブ	CLC920/950
1	FA2 – 8225 – 000		2	BUSHING ブッシング	
2	FB1 – 7039 – 000		1	LATCH, REAR ラッチ (ウシロ)	
3	FB1 – 7040 – 000		1	LATCH, FRONT ラッチ (マエ)	
4	FB2 – 0879 – 000		1	SPRING, TORSION ネジリ バネ	
5	FB2 – 0878 – 000		1	SPRING, TORSION ネジリ バネ	
6	FB2 – 0854 – 000	N	1	GUIDE, DOOR ドア ガイド	
7	FB2 – 0856 – 000		1	SHAFT, DOOR ドア ジク	
8	FB2 – 0857 – 000		1	SHAFT, HANDLE トッテ ジク	
9	FB2 – 0858 – 000		1	ROLLER, VERTICAL PATH, 1 タテパス ジュウドウ ローラ (1)	
10	FB2 – 0858 – 000		2	ROLLER, VERTICAL PATH, 1 タテパス ジュウドウ ローラ (1)	CLC920/950
11	FB2 – 4410 – 000		1	HANDLE, DOOR ドア トッテ	
12	FS5 – 0338 – 000		1	GEAR, 16T 16T ギア	
13	FS5 – 0338 – 000		2	GEAR, 16T 16T ギア	CLC920/950
14	FS5 – 1211 – 000		2	BUSHING ブッシング	
15	FS5 – 1211 – 000		4	BUSHING ブッシング	CLC920/950
16	FS5 – 2285 – 000		2	SPRING, COMPRESSION アッシュク バネ	
17	FS5 – 2285 – 000		4	SPRING, COMPRESSION アッシュク バネ	CLC920/950
18	XD9 – 0103 – 000		2	PIN,DOWEL ヘイコウ ピン	CLC920/950
19	XD9 – 0103 – 000		1	PIN,DOWEL ヘイコウ ピン	
501	XB1 – 2400 – 609		3	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XD2 – 1100 – 502		2	RING,E E リング	
503	XD2 – 1100 – 642		2	RING,E E リング	CLC900
	XD2 – 1100 – 642		6	RING,E E リング	CLC920/950

FIGURE 130 CONTROL PANEL ASSEMBLY
操作部


21
19
23
8
17
20
24C
(J5003)
(J5201)
18
9
18
26
18
18
18
with 24
22
3
5
4
18
10
1
6
12
18
24B
(J5001)
9
7
6
24A
18
2
14
13
(J5204)
(J5303)
7
(J5002)
(J5309)
with 24
14A
24
18
(J5308)
18
18
(J5202)
16
18
(J5310)
15
24E
(J3604)
27
25A
(J5101)
(J5305)
25
24D
(J5301)
11
25A
(J5102)
18
(J5304)
18

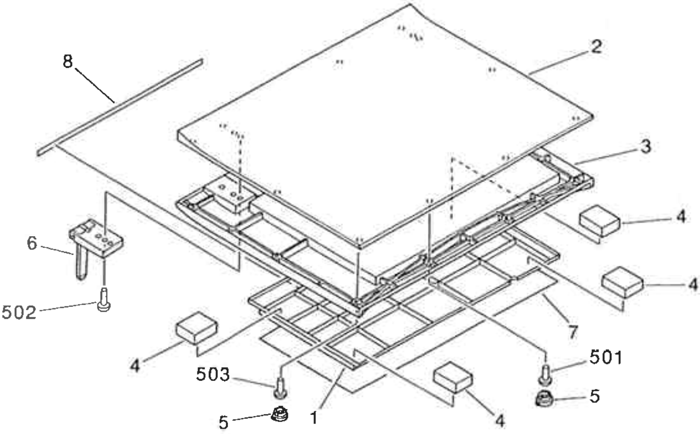
NOTE : This assembly does not include the parts shown with key No. 25 and 25A.

注 ： このユニットに、 Key No. 25, 25Aの部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
130 –	FG5 – 5900 – 040		1	CONTROL PANEL ASSEMBLY ソウサ ブ	JAPANESE
	FG5 – 5901 – 040		1	CONTROL PANEL ASSEMBLY ソウサ ブ	ENGLISH NJB,NJC,NJD
	FG5 – 5906 – 040		1	CONTROL PANEL ASSEMBLY ソウサ ブ	ENGLISH PFG,PFT,RCB RCC,RCD
	FG5 – 5903 – 040		1	CONTROL PANEL ASSEMBLY ソウサ ブ	ENGLISH QBX,QBY,QBZ
	FG5 – 5904 – 040		1	CONTROL PANEL ASSEMBLY ソウサ ブ	FRENCH
	FG6 – 0414 – 000		1	CONTROL PANEL ASSEMBLY ソウサ ブ	ITALIAN
	FG5 – 7130 – 040		1	CONTROL PANEL ASSEMBLY ソウサ ブ	KOREAN
	FG5 – 5905 – 040		1	CONTROL PANEL ASSEMBLY ソウサ ブ	GERMAN
	FG5 – 5902 – 040		1	CONTROL PANEL ASSEMBLY ソウサ ブ	ILLUSTRATION
1	FB2 – 4238 – 000		1	KEY TOP, NUMBERS テン キー	
2	FB2 – 4239 – 000		1	KEY TOP, MODE オウヨウ モード	
3	FB2 – 4240 – 000		1	KEY TOP, START スタート キー	
4	FB2 – 4241 – 000		1	KEY TOP, STOP ストップ キー	
5	FB2 – 4242 – 030		1	KEY TOP, RESET リセット キー	
6	FB2 – 4247 – 000		2	DAMPER, 1 ダンパ (1)	
7	FB2 – 4248 – 000		2	DAMPER, 2 ダンパ (2)	
8	FB2 – 4249 – 000		1	SHEET, MODE オウヨウ モード シート	JAPANESE
	FB2 – 6323 – 000		1	SHEET, MODE オウヨウ モード シート	ENGLISH
	FC2 – 3087 – 000		1	SHEET, MODE オウヨウ モード シート	KOREAN
	FB2 – 6325 – 000		1	SHEET, MODE オウヨウ モード シート	FRENCH
	FB4 – 2730 – 000		1	SHEET, MODE オウヨウ モード シート	ITALIAN
	FB2 – 6326 – 000		1	SHEET, MODE オウヨウ モード シート	GERMAN
	FB2 – 6324 – 000		1	SHEET, MODE オウヨウ モード シート	ILLUSTRATION
9	FB2 – 4252 – 000		2	MOUNT, CONTROL PANEL, 1 ソウサ ブ トリツケ ダイ (1)	
10	FB2 – 4255 – 000		1	MOUNT, CONTROL PANEL, 2 ソウサ ブ トリツケ ダイ (2)	
11	FB2 – 4256 – 000		1	MOUNT, CONTROL PANEL, 3 ソウサ ブ トリツケ ダイ (3)	
12	FF2 – 9061 – 000		1	CABLE, CONTROL PANEL, 1 ソウサ ブ ケーブル (1)	J5001,5303
13	FF2 – 9062 – 000		1	CABLE, CONTROL PANEL, 2 ソウサ ブ ケーブル (2)	J5002,5308
14	FF2 – 9063 – 000		1	CABLE, LCD LCD ケーブル	JAPANESE ENGLISH NJB,NJC,NJD J5204,5309

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
130 – 14	FF2 – 9152 – 000		1	CABLE, LCD LCD ソクセン	EXCEPT JAPANESE ENGLISH NJB,NJC,NJD J5204,5309
14A	WE8 – 5093 – 000		1	CORE, FERRITE フェライト コア	
15	FF2 – 9064 – 000		1	CABLE, CCT CCT ケーブル	J5202,5310
16	FG5 – 4852 – 000		1	LIQUID CRYSTAL DISPLAY PANEL エキショウ ソウサ ブ	
17	WT2 – 0217 – 000		1	CLAMP, CABLE クランプ	
18	XA9 – 0591 – 000		AR	SCREW, M3X8 タイト ネジ	
19	FB2 – 4243 – 000		1	COVER, LAMP FILTER ヒョウジ ランプ カバー	
20	FB2 – 4244 – 000		1	SUPPORT EXPOSURE LIGHT パネ ライト オサエ	
21	FB2 – 4234 – 000		1	COVER, CONTROL CARD コントロール カード フタ	
22	FB2 – 4236 – 000		1	PLATE, BLANKING メカクシ バン	
23	FB2 – 4233 – 000		1	COVER, MODE オウヨウ モード フタ	
24	FG5 – 3086 – 000		1	CONTROL PANEL PCB FAMILY ソウサブ ファミリー カイロ キバン	JAPANESE ENGLISH NJB,NJC,NJD
	FG5 – 3242 – 000		1	CONTROL PANEL PCB FAMILY ソウサブ ファミリー カイロ キバン	EXCEPT JAPANESE ENGLISH NJB,NJC,NJD
24A	FB2 – 4245 – 000		1	HOLDER, LED LED ホルダ	
24B	FB2 – 4257 – 000		1	SHEET, CLICK クリック シート	
24C	FF2 – 9060 – 000		1	CABLE, CONTROL PANEL ソウサ ブ ケーブル	J5003,5201
24D	FF2 – 9058 – 000		1	CABLE, CONTROL PANEL ソウサ ブ ケーブル	J5102,5304
24E	FF2 – 9059 – 000		1	CABLE, CONTROL PANEL ソウサ ブ ケーブル	J5101,5305
25	FF2 – 9070 – 000		1	CABLE, CONTROL PANEL, 3 ソウサ ブ ケーブル (3)	JAPANESE ENGLISH NJB,NJC,NJD
25A	WE8 – 5101 – 000		2	CORE, FERRITE フェライト コア	SEE NOTE JAPANESE ENGLISH NJB,NJC,NJD SEE NOTE
26	FB2 – 6289 – 000		1	SHEET, LIGHT – BLOCKING シャコウ シート	
27	FG5 – 3085 – 000		1	CONTROL PANEL PCB ASSEMBLY ソウサ ブ カイロ キバン	JAPANESE ENGLISH NJB,NJC,NJD
	FG5 – 3241 – 000		1	CONTROL PANEL PCB ASSEMBLY ソウサ ブ カイロ キバン	EXCEPT JPANESE ENGLISH NJB,NJC,NJD

FIGURE 160 COPYBOARD COVER ASSEMBLY
原稿台カバー部



NOTE : This assembly does not include the part shown with key No. 7.
注 ： このユニットに、 Key No. 7の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
160 –	FG5 – 5626 – 020		1	COPYBOARD COVER ASSEMBLY ゲンコウ ダイ カバー ブ	
1	FA3 – 0134 – 000		1	PLATE, MIRROR ミラー バン	
2	FB2 – 2578 – 000	N	1	COVER, COPYBOARD, UPPER アッパン (ウエ)	
3	FB2 – 2579 – 020	N	1	COVER, COPYBOARD, LOWER アッパン (シタ)	
4	FB2 – 2580 – 000		4	DAMPER, COPYBOARD COVER アッチャク バン ダンパ	
5	FB2 – 2581 – 000		6	RUBBER, COVER カバー ゴム	
6	FB2 – 4439 – 030		2	HINGE ヒンジ	
7	FA3 – 0136 – 050		1	CUSHION, COPYBOARD COVER アッチャク シート	SEE NOTE
8	FB3 – 6021 – 000		1	SPACER スペーサ	
501	XB1 – 2400 – 606		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XB1 – 2402 – 006		4	SCREW,MACH.,TRUSS HEAD,M4X20 バインド ネジ	
503	XB4 – 7401 – 006		6	SCREW,TAPPING,TRUSS HEAD,M4X10 バインド タッピン ネジ	

FIGURE 180 COUNTER ASSEMBLY
カウンタ部

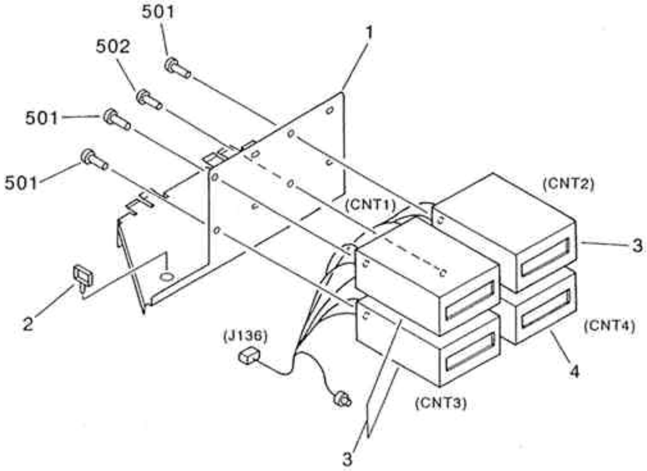


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
180 –	FG5 – 2570 – 000		1	COUNTER ASSEMBLY カウンタ ブ	100/115/120V 220V PFW,PFE,PFX,PFZ PFG,PFT
	FG5 – 3716 – 000		1	COUNTER ASSEMBLY カウンタ ブ	220V SBB,SBC,SBD TBC,TBD,TBE/240V
1	FB2 – 1343 – 000		1	MOUNT, COUNTER カウンタ ダイ	
2	WT2 – 0262 – 000		2	CLIP, CABLE ロッキング ワイヤ サドル	
3	WP1 – 0019 – 000		3	COUNTER カウンタ	CNT1,2,3 J136
4	WP1 – 0019 – 000		1	COUNTER カウンタ	100/115/120V 220V PFW,PFE,PFX,PFZ PFG,PFT CNT4 J136
501	XB1 – 2300 – 609		3	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2300 – 609		1	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	100/115/120V 220V PFW,PFE,PFX,PFZ PFG,PFT

FIGURE 240 TRANSFER CLEANING DRIVE ASSEMBLY
転写クリーナ駆動部

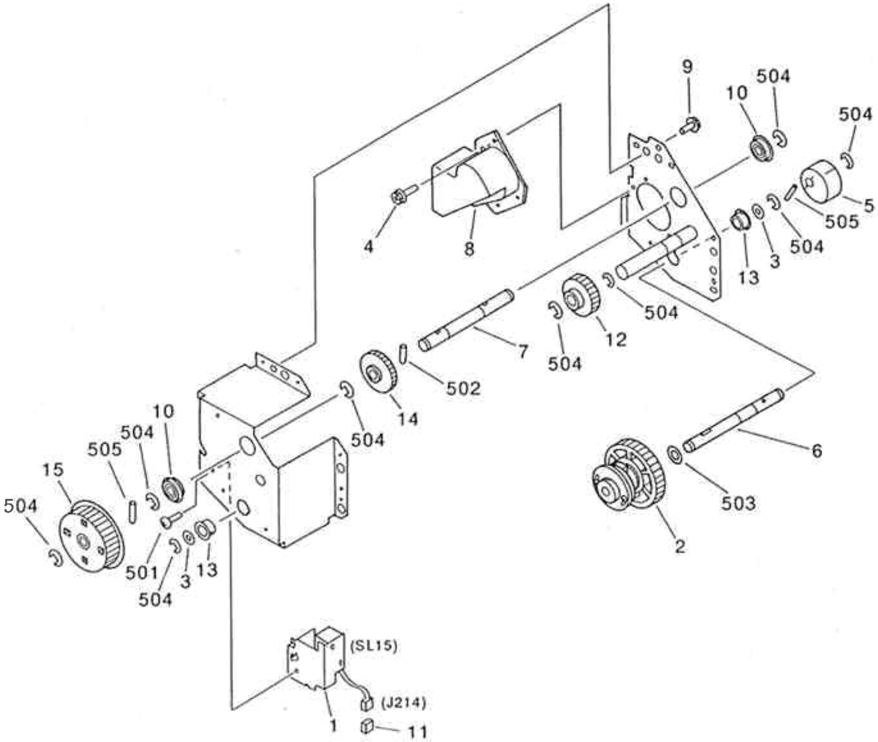
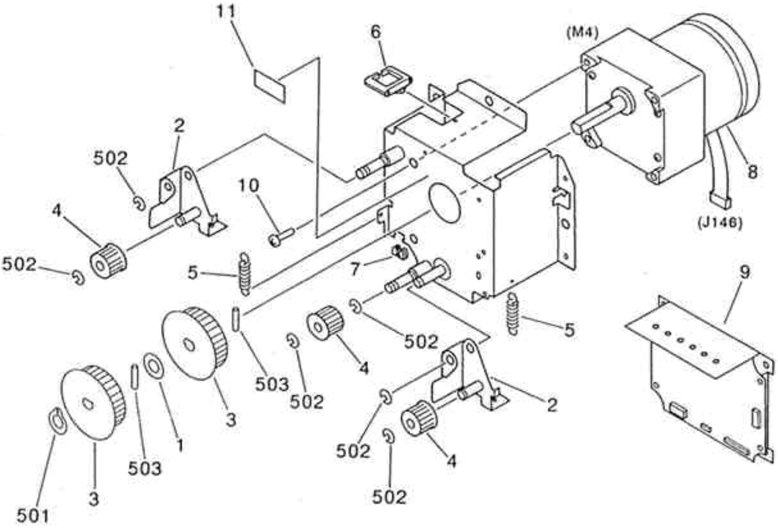

9
504
10
504
4
8
5
505
504
3
13
504
12
7
504
502
14
504
10
504
505
15
504
501
3
13
504
6
503
2
(SL15)
(J214)
1
11

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
240 –	FG5 – 5622 – 130		1	TRANSFER CLEANING DRIVE ASS'Y テンシャ クリーナ クドウ ブ	CLC900/920
	FG5 – 5976 – 150		1	TRANSFER CLEANING DRIVE ASS'Y テンシャ クリーナ クドウ ブ	CLC950
1	FG5 – 8302 – 000		1	TRANS'R CLEANER SOLENOID ASS'Y テンシャ クリーナ ソレノイド	SL15 J214
2	FG5 – 8301 – 000		1	TRANS.CLN.SPRING CLUTCH ASS'Y テンシャ クリーナ クドウ バネ クラッチ ブ	
3	FB2 – 6285 – 000		2	SHIM ヒョウジュン ワッシャ	
4	XA9 – 0626 – 000		2	SCREW,RS,M3X6 RS タイト ネジ	
5	FB2 – 0141 – 000		1	CAM カム	
6	FB2 – 0142 – 030		1	SHAFT, CAM カム ジク	
7	FB2 – 8942 – 030		1	SHAFT, PULLEY プーリ ジク	
8	FB2 – 0144 – 000		1	DUCT ダクト	
9	XA9 – 0789 – 000		2	SCREW,RS,M4X8 RS タイト ネジ	
10	XG9 – 0249 – 000		2	BEARING, BALL ボール ベアリング	
11	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J214
12	FS1 – 0486 – 000		1	GEAR, 24T 24T ギア	CLC900/920
	FS6 – 0002 – 000		1	GEAR, 24T 24T ギア	CLC950
13	XG9 – 0264 – 000		2	BEARING, BALL ボール ベアリング	
14	FS5 – 0989 – 000		1	GEAR, 30T 30T ギア	
15	FS2 – 3266 – 000		1	PULLEY, 30T 30T プーリ	
501	XB1 – 2300 – 609		3	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XD3 – 2200 – 182		1	PIN,DOWEL ヘイコウ ピン	
503	XD1 – 1108 – 225		1	SHIM ヒョウジュン ワッシャ	
504	XD2 – 1100 – 642		AR	RING,E E リング	
505	XD3 – 2200 – 162		2	PIN,DOWEL ヘイコウ ピン	

FIGURE 250 MAIN MOTOR ASSEMBLY
メインモータ部


11
6
(M4)
2
502
10
8
(J146)
4
502
5
7
9
5
502
4
503
502
2
503
1
3
502
4
502
3
501

NOTE : This assembly does not include the part shown with key No. 11.

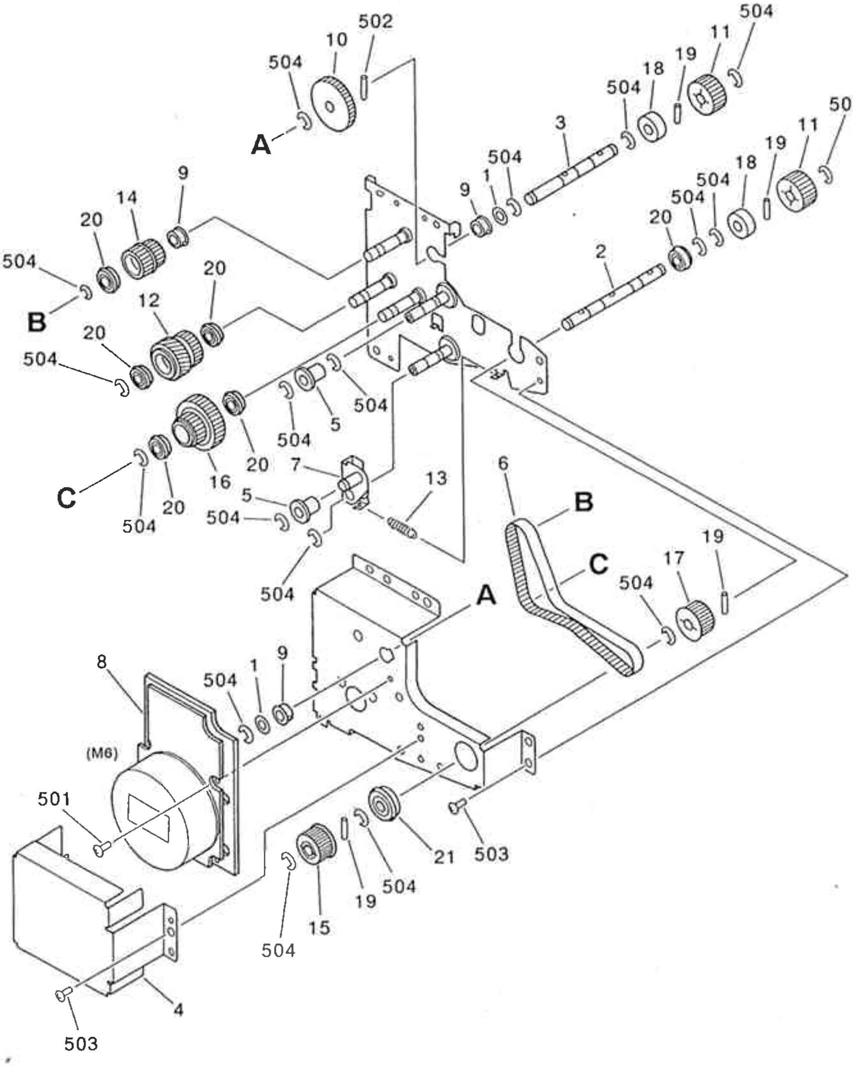
注 ： このユニットに、 Key No. 11の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
250 –	FG5 – 5620 – 000		1	MAIN MOTOR ASSEMBLY メイン モータ ブ	
1	XD9 – 0150 – 000		1	WASHER, PLAIN ワッシャ	
2	FF5 – 2050 – 000		2	ARM アーム	
3	FS5 – 3377 – 000		2	PULLEY, 30T 30T プーリ	
4	FS2 – 3512 – 000		3	PULLEY プーリ	
5	FS5 – 2537 – 000		2	SPRING, TENSION アーム スプリング	
6	WT2 – 0482 – 000		1	CLIP, CABLE エッジ サドル	
7	WT2 – 5300 – 000		1	CLIP, CABLE エッジ サドル	
8	NPN		1	MOTOR, DC 24V DC モータ	M4 J146
9	NPN		1	CONTROLLER, MOTOR モータ コントローラ カイロ キバン	
10	XA9 – 0628 – 000		4	SCREW,RS,M4X8 RS タイト ネジ	
11	FS6 – 8077 – 000		1	LABEL, "BELT" ベルト ラベル	SEE NOTE
501	XD2 – 2101 – 002		1	RING,GRIP グリップ リング	
502	XD2 – 1100 – 502		6	RING,E E リング	
503	XD3 – 2300 – 202		2	PIN,DOWEL ヘイコウ ピン	

FIGURE 251

PAPER PICK-UP MOTOR ASSEMBLY

給紙モータ部


504
502
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504
11
19
18
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504
A
3
504
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18
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9
1
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14
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20
504
B
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2
20
12
504
504
5
504
504
5
20
7
16
20
13
C
6
B
5
504
504
20
19
C
17
504
504
A
8
504
1
9
(M6)
501
21
503
504
19
15
504
4
503

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
251 –	FG5 – 2555 – 040		1	PAPER PICK – UP MOTOR ASSEMBLY キュウシ モータ ブ	
1	FB2 – 6285 – 000		3	SHIM ヒョウジュン ワッシャ	
2	FB2 – 0147 – 000		1	SHAFT, PULLEY プーリ ジク	
3	FB2 – 0148 – 000		1	SHAFT, GEAR ギア ジク	
4	FB2 – 0149 – 000		1	COVER, ROTOR ロータ カバー	
5	FB2 – 0150 – 000		2	IDLER アイドラ	
6	XF9 – 0462 – 000		1	BELT, TIMING タイミング ベルト	
7	FF5 – 2054 – 000		1	ARM アーム	
8	FH6 – 1015 – 020		1	MOTOR, DC 24V DC モータ	M6
9	XG9 – 0264 – 000		3	BEARING, BALL ボール ベアリング	
10	FS3 – 0465 – 000		1	GEAR, 36T 36T ギア	
11	FS4 – 0129 – 000		2	GEAR, 24T 24T ギア	
12	FS5 – 0653 – 000		1	GEAR, 48T/24T 48T/24T ギア	
13	FS5 – 2538 – 000		1	SPRING, TENSION ヒッパリ バネ	
14	FS5 – 3242 – 000		1	PULLEY, 24T/18T 24T/18T プーリ	
15	FS5 – 3243 – 000		1	PULLEY, 36T 36T プーリ	
16	FS5 – 3252 – 000		1	PULLEY, 24T/36T 24T/36T プーリ	
17	FS5 – 3255 – 000		1	PULLEY, 24T 24T プーリ	
18	FS5 – 6236 – 000		2	ROLLER ツキアテ コロ	
19	XD9 – 0108 – 000		4	PIN,DOWEL ヘイコウ ピン	
20	XG9 – 0094 – 000		6	BEARING, BALL ボール ベアリング	
21	XG9 – 0013 – 000		1	BEARING, BALL ボール ベアリング	
501	XB1 – 2401 – 209		3	SCREW,MACH.,TRUSS HEAD,M4X12 バインド ネジ	
502	XD3 – 2200 – 182		1	PIN,DOWEL ヘイコウ ピン	
503	XB1 – 2400 – 609		6	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
504	XD2 – 1100 – 642		AR	RING,E E リング	

FIGURE 252 DEVELOPING UNIT DRIVE ASSEMBLY
現像駆動部

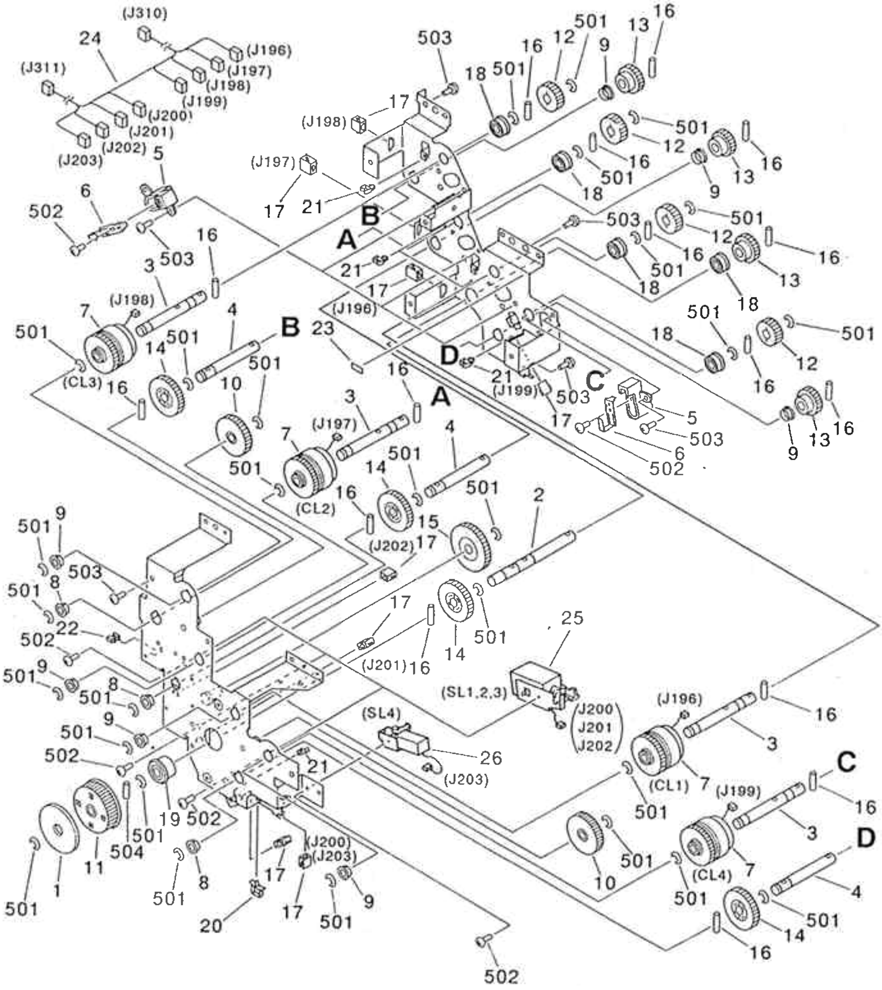
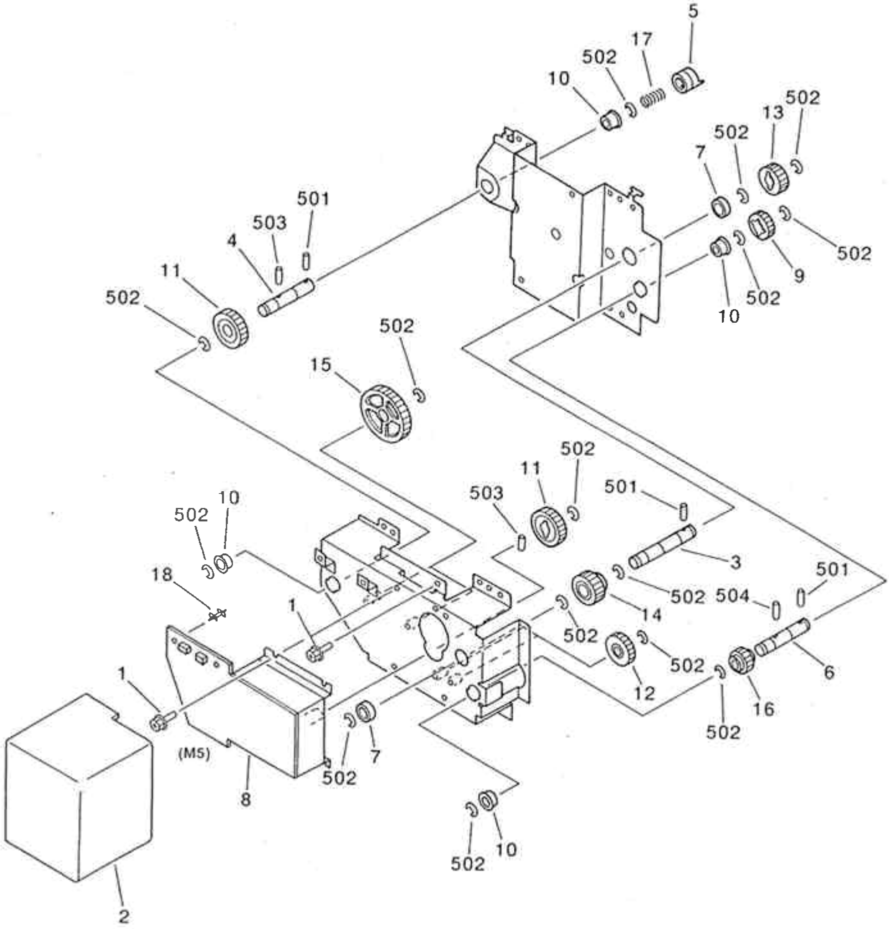

(J310)
24
(J196)
(J197)
(J198)
(J199)
(J311)
(J200)
(J201)
(J202)
(J203)
5
6
502
503
503
17
(J198)
(J197)
17
21
B
A
21
17
(J196)
23
18
501
16
12
501
9
13
16
12
16
13
16
501
18
9
503
501
12
16
16
18
501
13
18
501
18
12
501
16
13
16
9
D
21
(J199)
503
C
17
5
503
6
502
16
3
503
(J198)
7
4
501
14
501
B
(CL3)
16
501
10
16
3
A
(J197)
7
4
501
14
501
(CL2)
16
15
501
2
(J202)
17
17
14
501
(J201)
16
25
(SL1,2,3)
(J200)
J201
J202)
(SL4)
26
(J203)
(J196)
16
3
(CL1)
7
501
C
(J199)
16
3
D
10
501
(CL4)
7
4
501
501
14
16
501
9
501
8
503
22
502
501
9
501
8
501
9
502
21
19
502
501
504
11
1
501
8
501
(J200)
(J203)
17
17
20
501
9
502

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
252 –	FG5 – 5665 – 110		1	DEVELOPING UNIT DRIVE ASSEMBLY ゲンゾウ クドウ ブ	EXCEPT CLC900 PFE
	FG5 – 7132 – 070		1	DEVELOPING UNIT DRIVE ASSEMBLY ゲンゾウ クドウ ブ	CLC900 PFE
1	FA6 – 8279 – 000		1	FRANGE, PULLEY プーリ フランジ	
2	FB2 – 0333 – 000		1	SHAFT, MAIN メイン ニュウリョク ジク	
3	FB2 – 0334 – 000		4	SHAFT, DRIVE クドウ シュツリョク ジク	
4	FB2 – 0335 – 000		3	SHAFT, PRESSURE カアツ シュツリョク ジク	
5	FB2 – 0336 – 030		4	HOUSING, BIAS ハウジング	
6	FF5 – 4065 – 000		4	PLATE, TERMINAL デンキョク バン	
7	FH7 – 5469 – 000		4	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL1 – 4 J196 – 199
8	FS1 – 1202 – 000		3	BUSHING ブッシング	
9	FS1 – 1189 – 000		7	BUSHING ブッシング	
10	FS2 – 0577 – 000		2	GEAR, 36T 36T ギア	
11	FS2 – 3486 – 000		1	PULLEY, 30T 30T プーリ	
12	FS6 – 0835 – 000		4	GEAR, 28T 28T ギア	
13	FS5 – 0661 – 000		4	GEAR, 24T 24T ギア	
14	FS5 – 0662 – 000		4	GEAR, 36T 36T ギア	
15	FS5 – 0735 – 000		1	GEAR, 44T 44T ギア	
16	XD9 – 0108 – 000		16	PIN,DOWEL ヘイコウ ピン	
17	VS1 – 5057 – 002		8	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J196 – 203
18	XG9 – 0250 – 000		5	BEARING, BALL ボール ベアリング	
19	XG9 – 0208 – 000		1	BEARING, BALL ボール ベアリング	
20	WT2 – 0262 – 000		5	CLIP, CABLE ロッキング ワイヤ サドル	
21	WT2 – 0495 – 000		4	CLAMP, CABLE ケーブル クランプ	
22	WT2 – 5300 – 000		3	CLIP, CABLE エッジ サドル	
23	ME1 – 0038 – 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	EXCEPT CLC900 PFE
	FC2 – 3083 – 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	CLC900 PFE
24	FG5 – 3146 – 000		1	CABLE, DEVELOPING ゲンゾウ クドウ タバセン	J196 – 203,310,311
25	FG5 – 8524 – 000		3	DEVELOPING SOLENOID ASSEMBLY ゲンゾウ カアツ ソレノイド	MAGENTA/CYAN/YELLOW SL1 – 3 J200 – 202
26	FG5 – 8525 – 000		1	DEVELOPING SOLENOID ASSEMBLY ゲンゾウ カアツ ソレノイド	BLACK SL4 J203
501	XD2 – 1100 – 642		AR	RING,E E リング	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
252 − 502	XB1 − 2300 − 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインドネジ	
503	XB1 − 2400 − 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインドネジ	
504	XD3 − 2200 − 162		1	PIN,DOWEL ヘイコウピン	

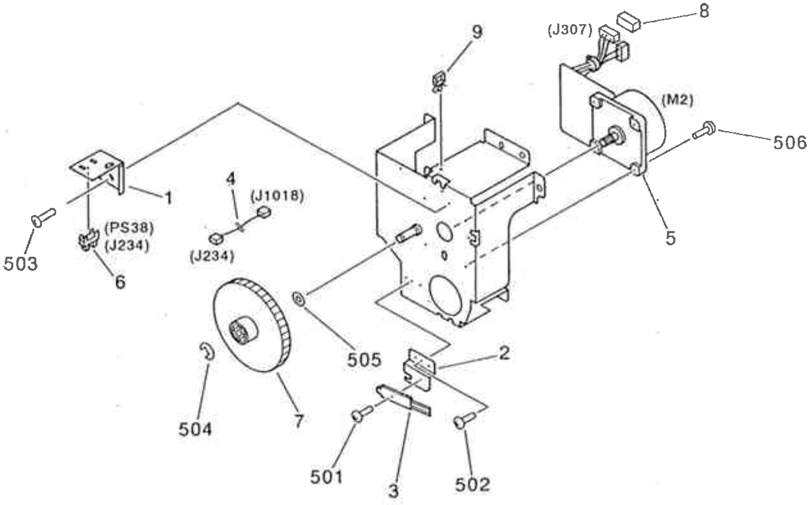
FIGURE 253 FIXING MOTOR ASSEMBLY 定着モータ部



5
17
502
10
13
502
502
7
501
503
4
11
502
502
9
10
502
10
502
15
502
11
502
501
503
10
502
3
18
502
504
501
14
1
502
1
502
12
6
(M5)
7
502
16
8
502
502
10
502
2

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
253 –	FG5 – 2693 – 020		1	FIXING MOTOR ASSEMBLY テイチャク モータ ブ	
1	XA9 – 0629 – 000		6	SCREW,RS,M4X8 RS タイト ネジ	
2	FB2 – 1175 – 000		1	COVER, MOTOR モータ カバー	
3	FB2 – 1176 – 000		1	SHAFT, GEAR ギア ジク	
4	FB2 – 1177 – 000		1	SHAFT, FEED ハンソウ ジク	
5	FB2 – 1178 – 000		1	COUPLING カップリング	
6	FB2 – 1179 – 000		1	SHAFT, DELIVERY ハイシ ジク	
7	XG9 – 0250 – 000		2	BEARING, BALL ボール ベアリング	
8	FH6 – 1013 – 000		1	MOTOR, DC24V モータ	M5
9	FS1 – 0542 – 000		1	GEAR, 22T 22T ギア	
10	FS1 – 1186 – 000		4	BUSHING ブッシング	
11	FS2 – 0441 – 000		2	GEAR, 28T 28T ギア	
12	FS2 – 0544 – 000		2	GEAR, 24T 24T ギア	
13	FS5 – 0685 – 000		1	GEAR, 24T 24T ギア	
14	FS5 – 0686 – 000		1	ONE – WAY GEAR, 24T 24T ワンウェイ ギア	
15	FS5 – 0687 – 000		2	GEAR, 46T 46T ギア	
16	FS5 – 0688 – 000		1	GEAR, 17T 17T ギア	
17	FS5 – 2545 – 000		1	SPRING, COMPRESSION アッシュク バネ	
18	VT2 – 0001 – 018		1	SUPPORT, PCB ロッキング サポート	
501	XD3 – 2200 – 142		3	PIN,DOWEL ヘイコウ ピン	
502	XD2 – 1100 – 642		AR	RING,E E リング	
503	XD3 – 2200 – 162		2	PIN,DOWEL ヘイコウ ピン	
504	XD3 – 2200 – 102		1	PIN,DOWEL ヘイコウ ピン	

FIGURE 255 DRUM MOTOR ASSEMBLY
ドラムモータ部

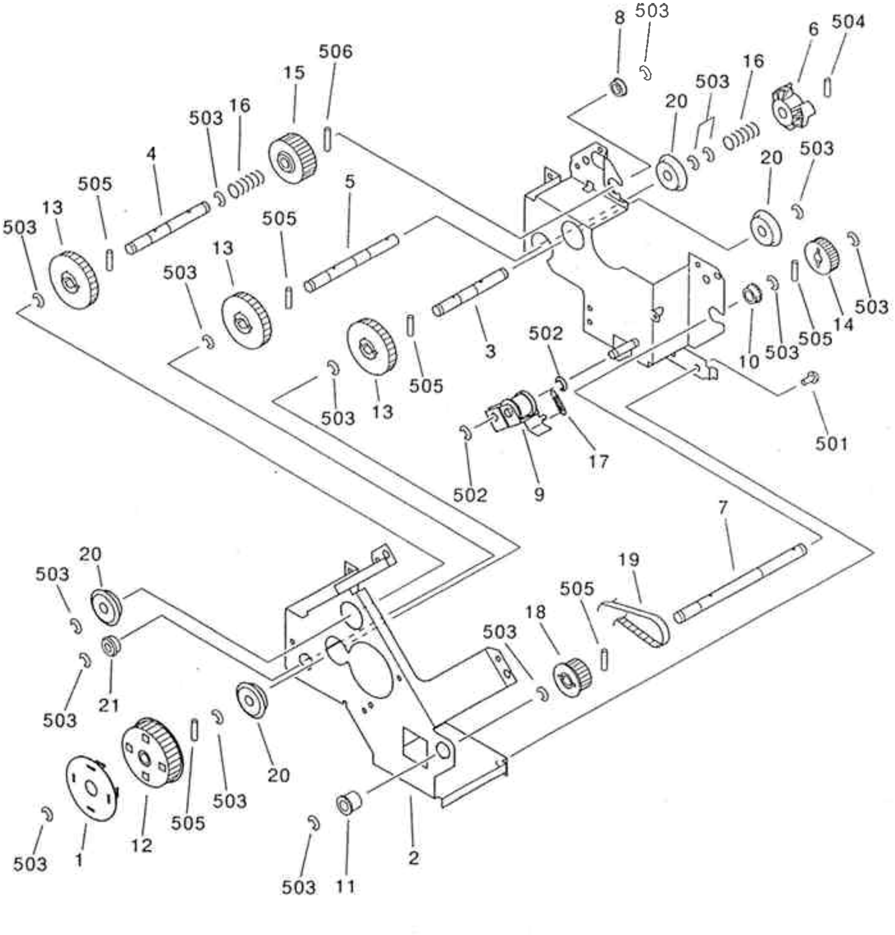

8
(J307)
9
(M2)
506
4
(J1018)
1
503
(PS38)
(J234)
(J234)
6
5
505
2
504
7
501
3
502

NOTE : This assembly does not include the parts shown with key No. 1, 6 and 503.

注 ： このユニットに、 Key No. 1, 6, 503の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
255 –	FG5 – 5978 – 060		1	DRUM MOTOR ASSEMBLY ドラム モータ ブ	
1	FB3 – 1769 – 020		1	SUPPORT, SENSOR センサ シバン	SEE NOTE
2	FB2 – 0397 – 000		1	SUPPORT, ELIM'R, STATIC CHARGE ジョデン シン シバン	
3	FC1 – 1117 – 000		1	ELIMINATOR, STATIC CHARGE ジョデン キ	
4	FF3 – 0256 – 000		1	CABLE, SENSOR センサ ソクセン	J234,1018
5	FH6 – 1008 – 000		1	MOTOR, DC モータ	M2 J307
6	FH7 – 7358 – 000		1	PHOTO – INTERRUPTER フォト インタラプタ	PS38 J234 SEE NOTE
7	FG5 – 8535 – 000		1	GEAR, 153T/28T 153T/28T ギア	
8	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J307
9	WT2 – 5219 – 000		1	CLAMP, CABLE ロッキング ワイヤ サドル	
501	XB1 – 2300 – 609		1	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XB1 – 2400 – 609		1	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	SEE NOTE
504	XD2 – 1100 – 642		1	RING,E E リング	
505	XD1 – 1108 – 213		1	SHIM ヒョウジュン ワッシャ	
506	XB1 – 2401 – 009		4	SCREW,MACH.,TRUSS HEAD,M4X10 バインド ネジ	

FIGURE 260 REGIST. FEEDER DRIVE ASSEMBLY
レジスト搬送駆動部


8
503
6
504
16
503
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506
15
503
16
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503
505
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13
503
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13
503
13
505
3
502
505
14
503
10
503
503
503
13
501
17
502
9
7
19
20
503
505
18
503
21
503
503
20
503
505
12
503
1
2
503
11

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
260 –	FG5 – 5655 – 020		1	REGIST. FEEDER DRIVE ASSEMBLY レジスト ハンソウ クドウ ブ	
1	FA6 – 8279 – 000		1	FRANGE, PULLEY プーリ フランジ	
2	FB2 – 9042 – 000		1	PLATE, DRIVE UPPER クドウ プレート (ウエ)	
3	FB2 – 1044 – 020		1	SHAFT, INPUT DRIVE クドウ ニュウリョク ジク	
4	FB2 – 9045 – 000		1	SHAFT, DRIVE クドウ ジク	
5	FB2 – 9046 – 000		1	SHAFT, FEED DRIVE ハンソウ クドウ ジク	
6	FB2 – 1047 – 000		1	COUPLING, INPUT ニュウリョク カップリング	
7	FB2 – 1048 – 000		1	SHAFT,PAPER PICK – UP UNIT DRIVE キュウシ クドウ ジク	
8	XG9 – 0211 – 000		1	BALL BEARING, MF128ZZ1MC3D4M ボール ベアリング	
9	FF5 – 4015 – 000		1	ROLLER, TENSION テンション ローラ	
10	FS1 – 1189 – 000		1	BUSHING ブッシング	
11	FS1 – 1201 – 000		1	BUSHING ブッシング	
12	FS2 – 3486 – 000		1	PULLEY, 30T 30T プーリ	
13	FS3 – 0570 – 000		3	GEAR, 40T 40T ギア	
14	FS5 – 0685 – 000		1	GEAR, 24T 24T ギア	
15	FS5 – 0706 – 000		1	GEAR, 32T 32T ギア	
16	FS5 – 2574 – 000		2	SPRING, COMPRESSION アッシュク バネ	
17	FS5 – 2575 – 000		1	SPRING, TENSION ヒッパリ バネ	
18	FS5 – 3243 – 000		1	PULLEY, 36T 36T プーリ	
19	XF9 – 0463 – 000		1	BELT, TIMING タイミング ベルト	
20	XG9 – 0208 – 000		4	BEARING, BALL ボール ベアリング	
21	XG9 – 0250 – 000		1	BEARING, BALL ボール ベアリング	
501	XB1 – 2400 – 609		4	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XD2 – 1100 – 502		2	RING,E E リング	
503	XD2 – 1100 – 642		AR	RING,E E リング	
504	XD3 – 2200 – 142		1	PIN,DOWEL ヘイコウ ピン	
505	XD3 – 2200 – 162		6	PIN,DOWEL ヘイコウ ピン	
506	XD3 – 2300 – 182		1	PIN,DOWEL ヘイコウ ピン	

FIGURE 261 DUPLEXING DRIVE ASSEMBLY (CLC950)
両面中継駆動部（CLC950）

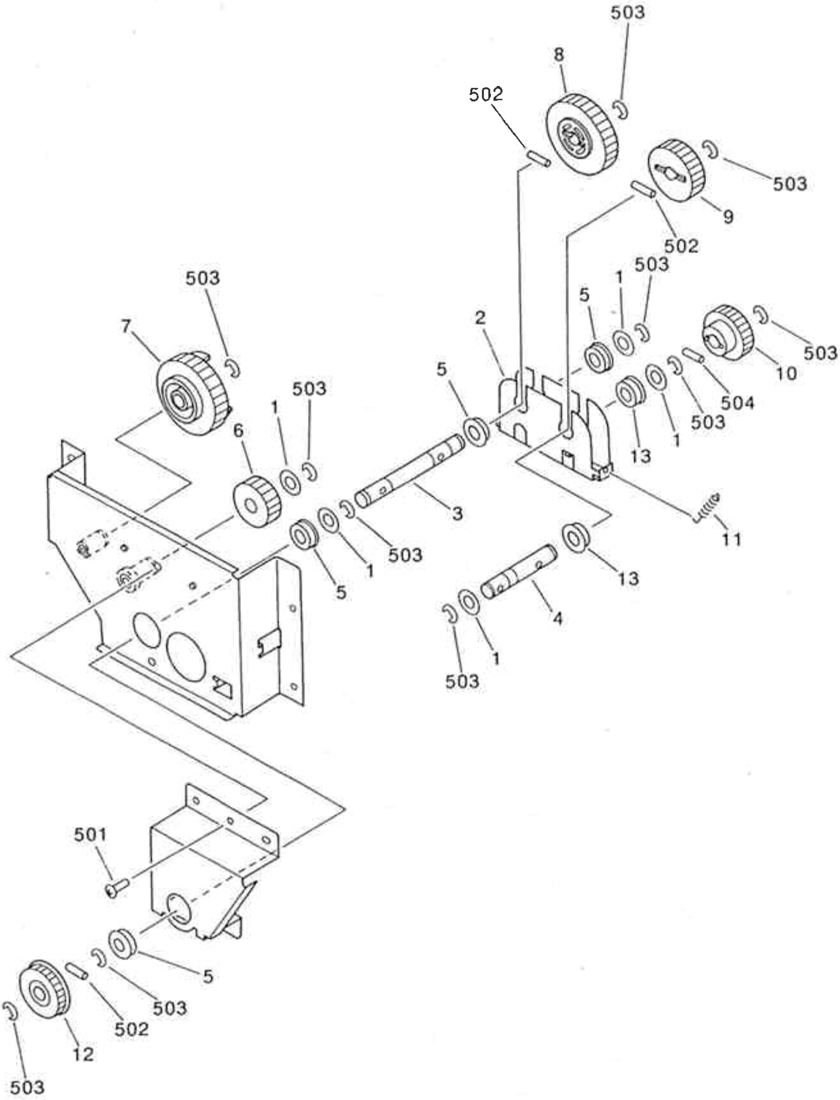

503
8
502
503
9
502
503
1
503
5
2
503
7
503
5
503
10
504
1
503
6
3
13
1
503
11
1
5
503
13
4
1
503
501
5
503
502
12
503

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
261 –	FG5 – 2711 – 030		1	DUPLEXING DRIVE ASSEMBLY リョウメン チュウケイ クドウ ブ	CLC950
1	FB2 – 6285 – 000		5	SHIM ヒョウジュン ワッシャ	
2	FB2 – 1303 – 000		1	ARM, SWING スウィング アーム	
3	FB2 – 1304 – 030		1	SHAFT, 1 シャフト (1)	
4	FB2 – 1305 – 020		1	SHAFT, 2 シャフト (2)	
5	XG9 – 0211 – 000		4	BALL BEARING, MF128ZZ1MC3D4M ボール ベアリング	
6	FS2 – 0392 – 000		1	GEAR, 20T 20T ギア	
7	FS4 – 0119 – 000		1	GEAR, 36T 36T ギア	
8	FS5 – 0662 – 000		1	GEAR, 36T 36T ギア	
9	FS5 – 0677 – 000		1	GEAR, 26T 26T ギア	
10	FS5 – 0678 – 000		1	GEAR, 24T 24T ギア	
11	FS5 – 2583 – 000		1	SPRING, TENSION ヒッパリ バネ	
12	FS5 – 3247 – 000		1	PULLEY, 30T 30T プーリ	
13	XG9 – 0094 – 000		2	BEARING, BALL ボール ベアリング	
501	XB1 – 2400 – 409		2	SCREW,MACH.,TRUSS HEAD,M4X4 バインド ネジ	
502	XD3 – 2200 – 162		3	PIN,DOWEL ヘイコウ ピン	
503	XD2 – 1100 – 642		AR	RING,E E リング	
504	XD3 – 2200 – 122		1	PIN,DOWEL ヘイコウ ピン	

FIGURE 265 DUPLEX PRINT DRIVE ASSEMBLY (CLC950)
両面駆動部（CLC950）

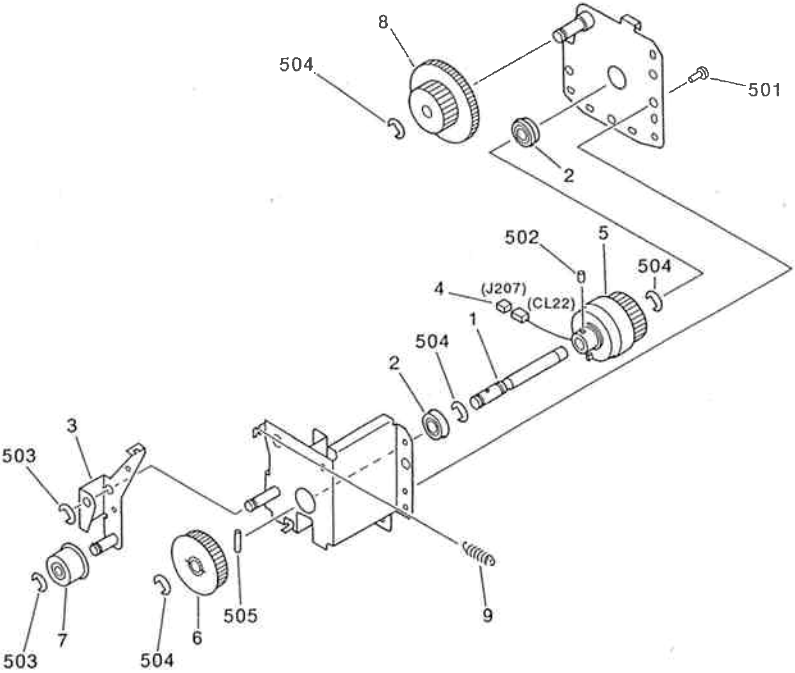
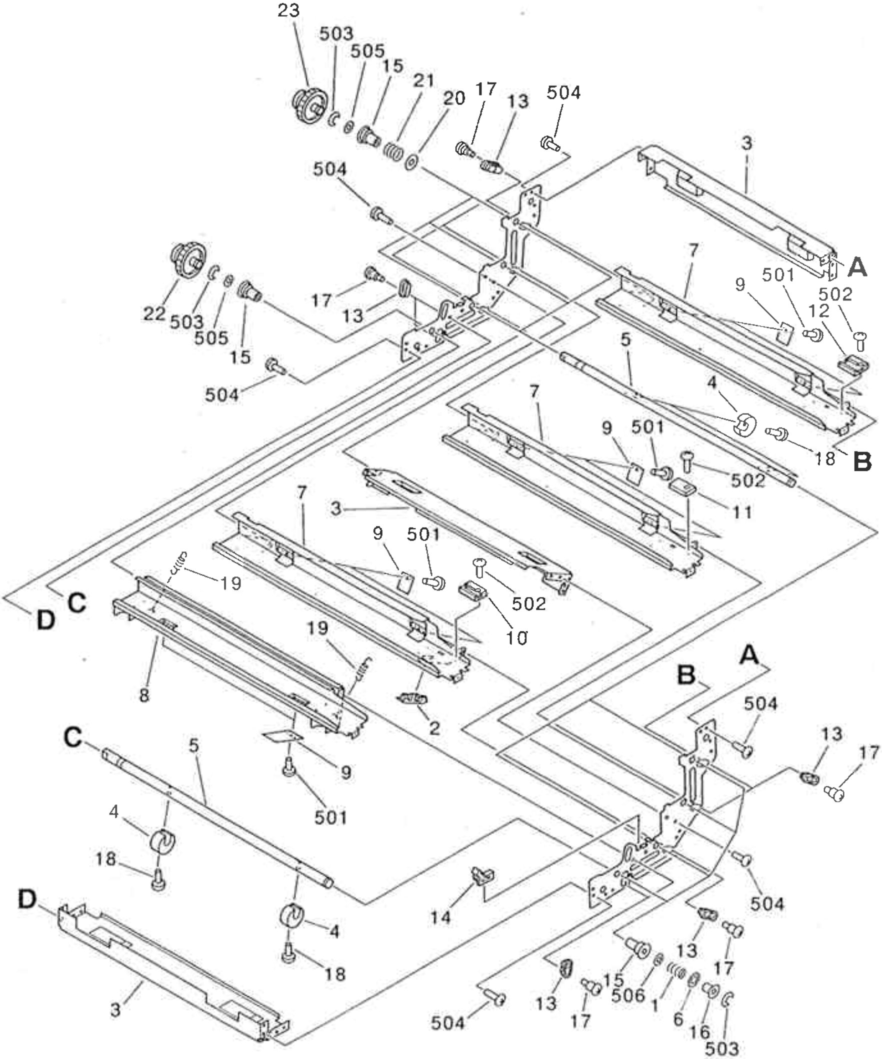

8
504
501
2
502
5
504
4
(J207)
(CL22)
1
504
2
3
503
503
7
504
6
505
9

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
265 –	FG5 – 2559 – 000		1	DUPLEX PRINT DRIVE ASSEMBLY リョウメン クドウ ブ	**CLC950**
1	FB2 – 1320 – 000		1	SHAFT, PULLEY プーリ ジク	
2	XG9 – 0094 – 000		2	BEARING, BALL ボール ベアリング	
3	FF5 – 2056 – 000		1	ARM アーム	
4	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J207
5	FH7 – 5477 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL22 J207
6	FS2 – 3494 – 020		1	PULLEY, 39T 39T プーリ	
7	FS2 – 3512 – 000		1	PULLEY プーリ	
8	FS5 – 0654 – 000		1	GEAR, 51T/27T 51T/27T ギア	
9	FS5 – 2539 – 000		1	SPRING, TENSION ヒッパリ バネ	
501	XB1 – 2400 – 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XB6 – 2400 – 608		1	SETSCREW,M4X6 ロッカク アナツキ トメネジ	
503	XD2 – 1100 – 502		2	RING,E E リング	
504	XD2 – 1100 – 642		4	RING,E E リング	
505	XD3 – 2200 – 162		1	PIN,DOWEL ヘイコウ ピン	

FIGURE 270 DEVELOPING ENGAGEMENT ASSEMBLY

現像加圧部


23
503
505
15
21
20
17
13
504
3
504
A
7
9
501
502
12
22
503
505
15
17
13
504
5
4
18
B
7
9
501
502
11
7
3
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501
502
10
19
C
D
19
8
2
A
B
504
13
17
C
5
9
501
4
18
D
4
18
3
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504
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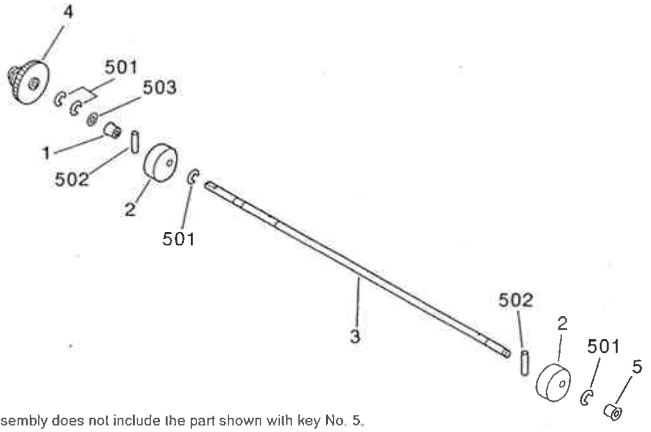
506
1
6
16
503
504
17

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
270 -	FG5 - 5660 - 120		1	DEVELOPING ENGAGEMENT ASSEMBLY ゲンゾウ カアツ ブ	
1	FS6 - 2161 - 000		4	SPRING, COMPRESSION アッシュク バネ	
2	FB2 - 0330 - 000		1	SLIDER スライダ	
3	FB2 - 8897 - 000		3	CROSSMEMBER, PRESSURE カアツ ステイ	
4	FB2 - 1350 - 000		8	CAM, PRESSURE カアツ カム	
5	FB2 - 8898 - 020		4	SHAFT, CAM, PRESSURE カアツ カム ジク	
6	FS5 - 6363 - 000		4	WASHER ワッシャ	
7	FB2 - 1353 - 020		3	RAIL, DEVELOPING ゲンゾウ レール	MAGENTA/CYAN/YELLOW
8	FB2 - 1354 - 020		1	RAIL, DEVELOPING ゲンゾウ レール	BLACK
9	FB2 - 1355 - 000		8	SPRING, LEAF イタ バネ	
10	FB2 - 1356 - 000		1	HOLDER, SLIDE フール プレート スライダ	MAGENTA
11	FB2 - 1357 - 000		1	HOLDER, SLIDE フール プレート スライダ	CYAN
12	FB2 - 1358 - 000		1	HOLDER, SLIDE フール プレート スライダ	YELLOW
13	FB2 - 1359 - 000		10	HOLDER, SLIDE, 1 スライド ホルダ (1)	
14	FB2 - 1360 - 000		1	HOLDER, SLIDE, 2 スライド ホルダ (2)	
15	FS1 - 1235 - 000		8	BUSHING ブッシング	
16	FS5 - 6362 - 000		4	STOPPER, THRUST スラスト ストッパ	
17	FS1 - 9168 - 000		10	SCREW,STEPPED,M4X5 ダンビス	
18	XA9 - 0809 - 000		8	SCREW,TP,M3X10 TP ネジ	
19	FS5 - 2614 - 000		2	SPRING, TENSION ヒッパリ バネ	
20	FB2 - 0300 - 000		3	WASHER ワッシャ	
21	FS5 - 2627 - 000		3	SPRING, COMPRESSION アッシュク バネ	
22	FG5 - 8523 - 000		1	DEVELOPING SPRING CLUTCH ASS'Y ゲンゾウ バネ クラッチ ブ	BLACK
23	FG5 - 8522 - 000		3	DEVELOPING SPRING CLUTCH ASS'Y ゲンゾウ バネ クラッチ ブ	MAGENTA/CYAN/YELLOW
501	XB1 - 2300 - 409		8	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
502	XB1 - 2300 - 609		3	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XD2 - 1100 - 642		AR	RING,E E リング	
504	XB1 - 2400 - 609		6	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
505	XD1 - 1108 - 222		4	SHIM ヒョウジュン ワッシャ	
506	XD1 - 1108 - 233		4	SHIM ヒョウジュン ワッシャ	

FIGURE 275 TRANSFER CAM ASSEMBLY
転写カム部



NOTE : This assembly does not include the part shown with key No. 5.

注 ： このユニットに、Key No. 5の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
275 –	FG5 – 5621 – 100		1	TRANSFER CAM ASSEMBLY テンシャ カム ブ	
1	97 – 1695 – 000		1	BUSHING ブッシング	
2	FB2 – 0135 – 000		2	CAM, TRANSFER テンシャ カム	
3	FB2 – 0136 – 040		1	SHAFT, TRANSFER CAM テンシャ カム ジク	
4	FG5 – 8300 – 000		1	TRANS.CAM SPRING CLUTCH ASS'Y テンシャ カム バネ クラッチ ブ	
5	97 – 1695 – 000		1	BUSHING ブッシング	SEE NOTE
501	XD2 – 1100 – 642		4	RING,E E リング	
502	XD3 – 2200 – 182		2	PIN,DOWEL ヘイコウ ピン	
503	XD1 – 1108 – 222		1	SHIM ヒョウジュン ワッシャ	

FIGURE 290 WASTE TONER DRIVE ASSEMBLY
廃トナー駆動部

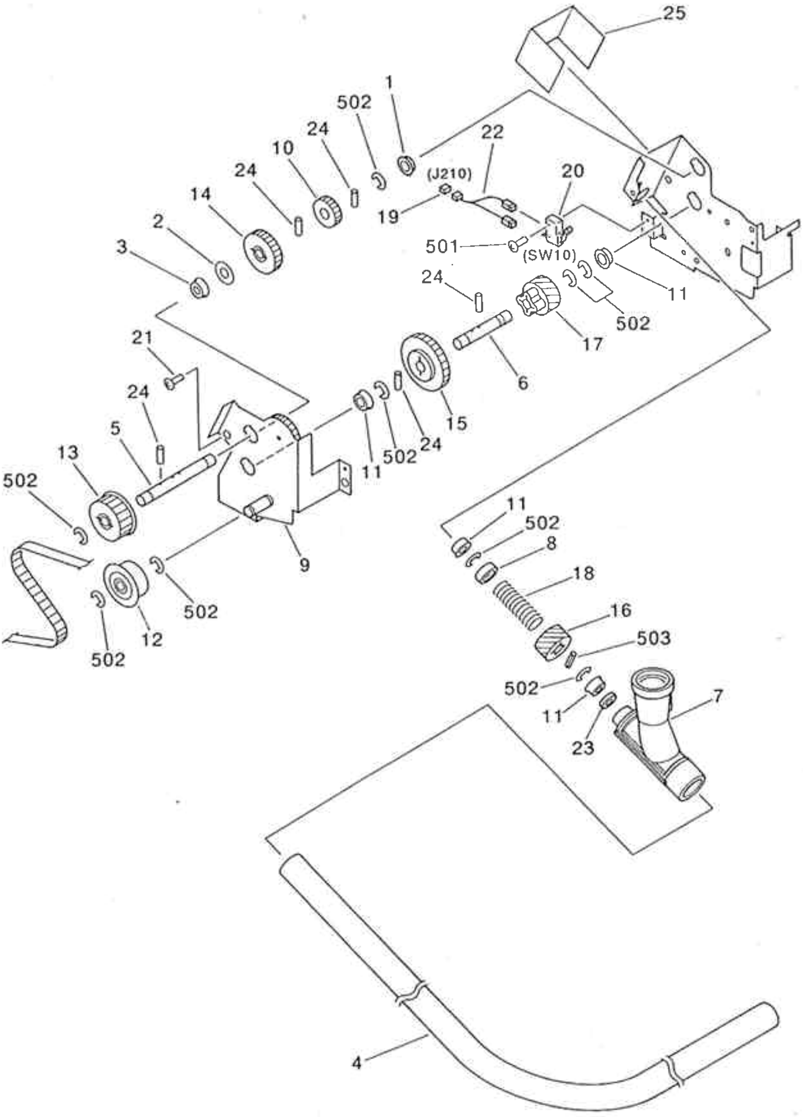
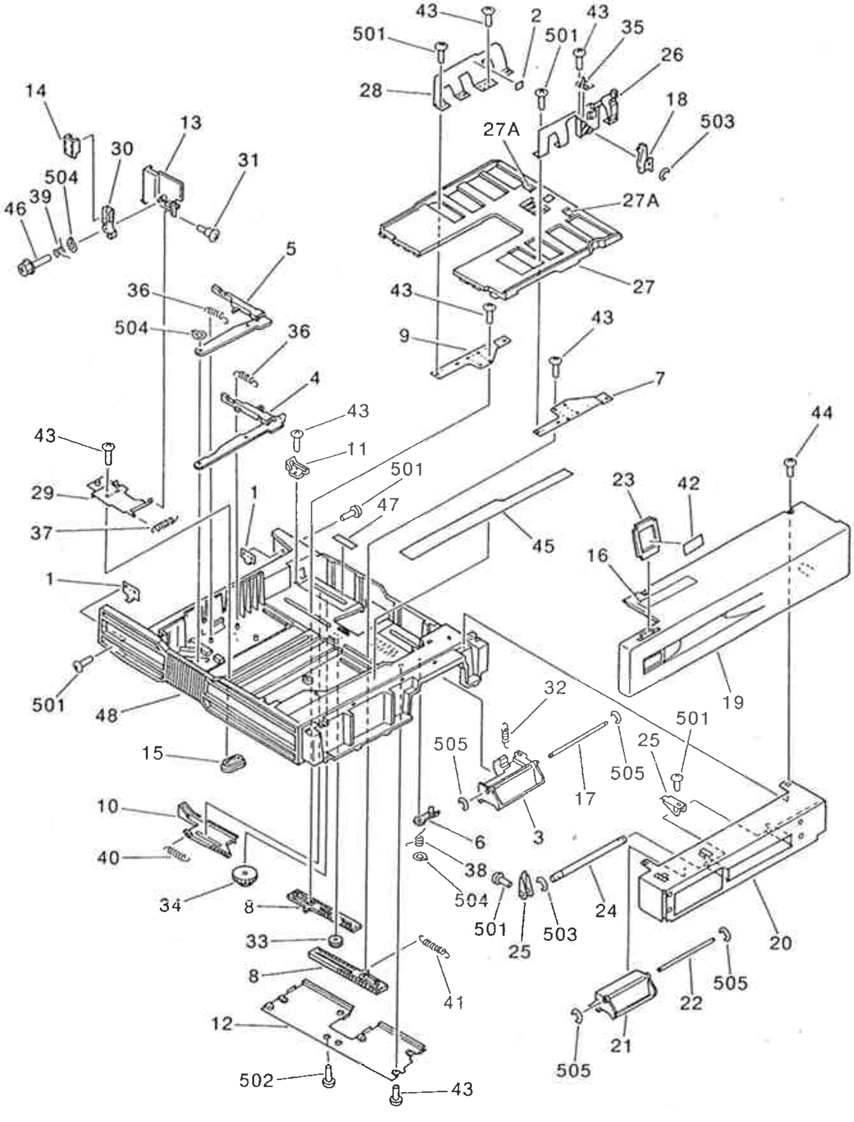

25
1
502
22
24
10
24
14
(J210)
20
2
3
19
501
(SW10)
24
11
502
17
21
6
24
15
5
13
11
502
24
502
9
11
502
8
18
502
12
502
16
503
502
7
11
23
4

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
290 –	FG5 – 5636 – 040		1	WASTE TONER DRIVE ASSEMBLY ハイトナー クドウ ブ	
1	FA9 – 2112 – 000		1	BUSHING ブッシング	
2	FB2 – 6285 – 000		1	SHIM ヒョウジュン ワッシャ	
3	XG9 – 0264 – 000		1	BEARING, BALL ボール ベアリング	
4	FF5 – 4035 – 000		1	SHAFT, SPRING パイプ スクリュ	
5	FB2 – 0459 – 000		1	SHAFT, DRIVE ニュウリョク ジク	
6	FB2 – 0460 – 020		1	SHAFT, CONNECTING レンケツ ジク	
7	FB2 – 9028 – 000		1	PIPE, WASTE TONER ハイトナー キャッチ	
8	FB2 – 0463 – 000		1	RETAINER, SPRING バネ ウケ	
9	FF5 – 2028 – 000		1	PLATE, SIDE クドウ ソト ソクバン	
10	FS1 – 0422 – 000		1	GEAR, 20T 20T ギア	
11	FS1 – 1449 – 000		4	BUSHING ブッシング	
12	FS1 – 6214 – 000		1	PULLEY プーリ	
13	FS2 – 3490 – 000		1	PULLEY, 22T 22T プーリ	
14	FS3 – 0039 – 000		1	GEAR, 30T 30T ギア	
15	FS3 – 0168 – 000		1	GEAR, 40T 40T ギア	
16	FS5 – 0663 – 000		1	GEAR, 16T 16T ギア	
17	FS5 – 0664 – 020		1	GEAR, 20T 20T ギア	
18	FS5 – 2594 – 000		1	SPRING, COMPRESSION アッシュク バネ	
19	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J210
20	WC4 – 5023 – 000		1	MICRO SWITCH マイクロ スイッチ	SW10
21	XA9 – 0629 – 000		4	SCREW,RS,M4X8 RS タイト ネジ	
22	FG5 – 3147 – 000		1	WASTE TONER SENSING CABLE ASSY ハイトナー ツマリ ケンチ ソクセン ブ	J210
23	X71 – 9310 – 000		1	SEAL, OIL オイル シール	
24	XD9 – 0108 – 000		5	PIN,DOWEL ヘイコウ ピン	
25	FB3 – 1420 – 000		1	SEAL, WASTE TONER ハイ トナー シール	
501	XB1 – 2231 – 009		1	SCREW,MACH.,TRUSS HEAD,M2.3X10 バインド ネジ	
502	XD2 – 1100 – 642		AR	RING,E E リング	
503	XD3 – 1200 – 142		1	PIN,SPRING スプリング ピン	

FIGURE 300 CASSETTE (LARGE)
カセット（大）


43
501
2
43
501
35
26
28
18
503
14
13
27A
30
31
27A
504
39
46
5
27
36
43
504
36
43
9
4
7
43
11
44
43
29
501
1
47
37
23
42
45
1
16
19
501
48
32
15
505
25
505
501
10
17
6
3
40
38
504
25
34
8
501
503
24
20
33
8
41
505
22
12
21
505
502
43

NOTE : This assembly does not include the part shown with key No. 42.

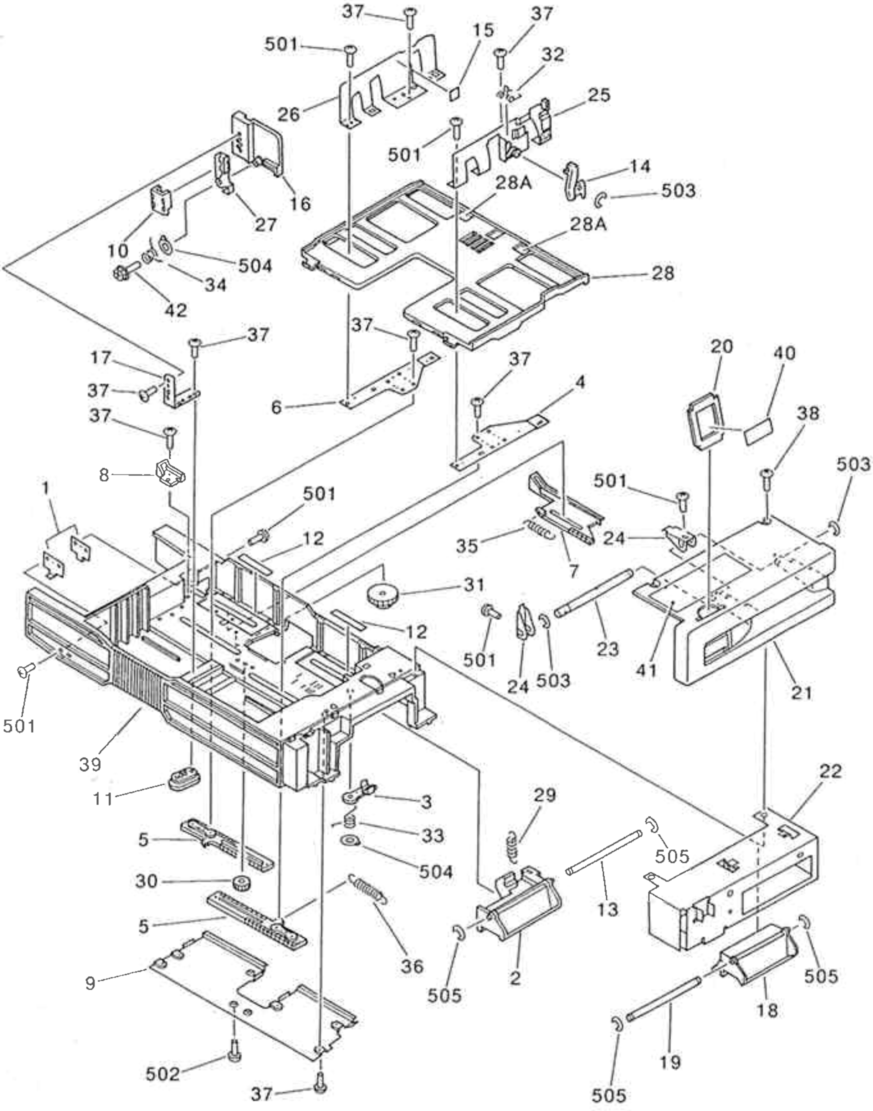
注 ： このユニットに、 Key No. 42の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
300 –	NPN		RF	CASSETTE カセット	LARGE SIZE F32 – 0101
1	FA5 – 3325 – 020		2	PLATE, STOP ストッパ	
2	FS5 – 8618 – 000		1	LABEL, "MAXIMUM LOAD" セキサイ セイゲン ラベル	
3	FB1 – 8471 – 020		1	LATCH, CASSETTE, 2 カセット トッテ (2)	
4	FB1 – 8472 – 000		1	LEVER, SENSOR, 1 コウタン ケンチ カム (1)	
5	FB1 – 8473 – 000		1	LEVER, SENSOR, 2 コウタン ケンチ カム (2)	
6	FB1 – 8478 – 020		1	ARM, RELEASE カイジョ アーム	
7	FB1 – 8479 – 000		1	PLATE, SIZE, SIDE, FRONT 1 サイド キセイ バン (マエ 1)	
8	FB1 – 8480 – 030		2	PLATE, RACK ラック バン	
9	FB1 – 8481 – 000		1	PLATE, SIZE, SIDE, REAR 1 サイド キセイ バン (ウシロ 1)	
10	FB1 – 8482 – 000		1	PLATE, RACK ボリューム ラック バン	
11	FB1 – 8483 – 000		1	KNOB, SIDE PLATE キセイ バン トッテ	
12	FB1 – 8484 – 000		1	COVER, BACK SIDE ウラ カバー	
13	FB1 – 8485 – 000		1	PLATE, END コウタン キセイ バン	
14	FB1 – 8488 – 020		1	KNOB, END PLATE コウタン キセイ ツマミ	
15	FB1 – 8493 – 000		1	COUPLER, SLIDE スライド コマ	
16	FS5 – 8827 – 020		1	LABEL, SET, OHP OHP セット ラベル	EXCEPT KOREAN
	FC2 – 3089 – 000		1	LABEL, SET, OHP OHP セット ラベル	KOREAN
17	FB1 – 8685 – 000		1	ROD, LATCH HANDLE トッテ シジ ジク	
18	FB1 – 8699 – 020		1	LATCH サイド キセイ バン ツマミ	
19	FB2 – 0961 – 030		1	COVER, CASSETTE カセット カバー	
20	FB2 – 0962 – 050		1	SUPPORT, COVER カバー シジバン	
21	FB2 – 0963 – 040		1	LATCH, CASSETTE, 1 カセット トッテ (1)	
22	FB3 – 7987 – 000		1	ROD, HANDLE LATCH ハンドル ジク	
23	FB2 – 0965 – 000		1	PLATE, SIZE サイズ プレート	
24	FB2 – 0969 – 000		1	SHAFT, ARM アーム ジク	
25	FB2 – 0970 – 000		2	ARM アーム	
26	FF5 – 1510 – 030		1	SIDE PLATE, SIZE, FRONT 2 サイド キセイ バン (マエ 2)	
27	FF5 – 1511 – 000		1	PLATE, PAPER LIFTING ナカ イタ	
27A	FB1 – 8694 – 000		2	SHEET, FRICTION ブンリ シート	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
300 – 28	FF5 – 1513 – 000		1	SIDE PLATE, SIZE, REAR 2 サイド キセイ バン (ウシロ 2)	
29	FF5 – 1515 – 020		1	MOUNT, END PLATE コウタン キセイ ダイ	
30	FF5 – 1541 – 000		1	LEVER, END PLATE コウタン キセイ レバー	
31	FS1 – 9102 – 000		1	SCREW,STEPPED,M3 ダンビス	
32	FS3 – 2051 – 000		1	SPRING, TENSION ヒッパリ バネ	
33	FS5 – 0388 – 000		1	GEAR, 14T 14T ギア	
34	FS5 – 0532 – 000		1	GEAR, 15T/42T 15T/42T ギア	
35	FS5 – 2325 – 000		1	SPRING, TORSION ネジリ バネ	
36	FS5 – 2326 – 000		2	SPRING, TENSION ヒッパリ バネ	
37	FS5 – 2328 – 000		1	SPRING, TENSION ヒッパリ バネ	
38	FS5 – 2405 – 020		1	SPRING, TORSION ネジリ バネ	
39	FS5 – 2406 – 000		1	SPRING, TORSION ネジリ バネ	
40	FS5 – 2413 – 000		1	SPRING, TENSION ヒッパリ バネ	
41	FS5 – 2479 – 000		1	SPRING, TENSION ヒッパリ バネ	
42	FS5 – 8620 – 000		1	LABEL, PAPER SIZE ヨウシ サイズ ラベル	SEE NOTE
43	FC1 – 6854 – 000		12	SCREW, M4X8 P タイト ネジ	
44	FA9 – 2753 – 000		7	SCREW,M4X10 P タイト ネジ	
45	FS6 – 8072 – 000		1	LABEL, "INSTRUCTION" カセット ヨウシ ホキュウ ラベル	
46	XA9 – 0768 – 000		1	SCREW,M4X8 B タイト ネジ	
47	FB1 – 8759 – 000		2	PAD パッド	
48	FF5 – 2236 – 030	N	1	BODY, CASSETTE カセット オケ	
501	XB1 – 2400 – 609		8	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XB4 – 6300 – 809		2	SCREW,TAPPING,PAN HEAD,M3X8 ナベ タッピン ネジ	
503	XD2 – 1100 – 642		4	RING,E E リング	
504	XD2 – 2100 – 802		3	RING,GRIP グリップ リング	
505	XD2 – 1100 – 502		4	RING,E E リング	

FIGURE 305

CASSETTE (SMALL)
カセット（小）


37
501
15
37
32
25
26
501
16
27
10
14
503
28A
28A
504
34
42
28
37
37
17
37
37
6
4
20
40
38
8
503
501
1
501
12
35
24
7
31
12
501
24
503
23
41
21
501
39
22
11
3
29
33
5
504
505
13
30
5
36
505
2
505
18
9
19
502
505
37

NOTE : This assembly does not include the part shown with key No. 40.

注 ： このユニットに、 Key No. 40の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
305 –	NPN		RF	CASSETTE カセット	SMALL SIZE F32 – 0102
1	FA5 – 3325 – 020		2	PLATE, STOP ストッパ	
2	FB1 – 8471 – 020		1	LATCH, CASSETTE, 2 カセット トッテ (2)	
3	FB1 – 8478 – 020		1	ARM, RELEASE カイジョ アーム	
4	FB1 – 8479 – 000		1	PLATE, SIZE, SIDE, FRONT 1 サイド キセイ バン (マエ 1)	
5	FB1 – 8480 – 030		2	PLATE, RACK ラック バン	
6	FB1 – 8481 – 000		1	PLATE, SIZE, SIDE, REAR 1 サイド キセイ バン (ウシロ 1)	
7	FB1 – 8482 – 000		1	PLATE, RACK ボリューム ラック バン	
8	FB1 – 8483 – 000		1	KNOB, SIDE PLATE キセイ バン トッテ	
9	FB1 – 8484 – 000		1	COVER, BACK SIDE ウラ カバー	
10	FB1 – 8488 – 020		1	KNOB, END PLATE コウタン キセイ ツマミ	
11	FB1 – 8490 – 000		1	COUPLER, SLIDE スライド コマ	
12	FB1 – 8759 – 000		2	PAD パッド	
13	FB1 – 8685 – 000		1	ROD, LATCH HANDLE トッテ シジ ジク	
14	FB1 – 8699 – 020		1	LATCH サイド キセイ バン ツマミ	
15	FS5 – 8618 – 000		1	LABEL, "MAXIMUM LOAD" セキサイ セイゲン ラベル	
16	FB2 – 0915 – 000		1	PLATE, END コウタン キセイ バン	
17	FB2 – 0916 – 000		1	MOUNT, END PLATE コウタン キセイ ダイ	
18	FB2 – 0963 – 040		1	LATCH, CASSETTE, 1 カセット トッテ (1)	
19	FB3 – 7987 – 000		1	ROD, HANDLE LATCH ハンドル ジク	
20	FB2 – 0965 – 000		1	PLATE, SIZE サイズ プレート	
21	FB2 – 0966 – 020		1	COVER, CASSETTE カセット カバー	
22	FB2 – 0967 – 000		1	SUPPORT, COVER カバー シジバン	
23	FB2 – 0968 – 000		1	SHAFT, ARM アーム ジク	
24	FB2 – 0970 – 000		2	ARM アーム	
25	FF5 – 1510 – 030		1	SIDE PLATE, SIZE, FRONT 2 サイド キセイ バン (マエ 2)	
26	FF5 – 1513 – 000		1	SIDE PLATE, SIZE, REAR 2 サイド キセイ バン (ウシロ 2)	
27	FF5 – 1541 – 000		1	LEVER, END PLATE コウタン キセイ レバー	
28	FF5 – 2045 – 000		1	PLATE, PAPER LIFTING ナカ イタ	
28A	FB1 – 8497 – 000		2	SHEET, FRICTION ブンリ シート	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
305 – 29	FS3 – 2051 – 000		1	SPRING, TENSION ヒッパリ バネ	
30	FS5 – 0388 – 000		1	GEAR, 14T 14T ギア	
31	FS5 – 0532 – 000		1	GEAR, 15T/42T 15T/42T ギア	
32	FS5 – 2325 – 000		1	SPRING, TORSION ネジリ バネ	
33	FS5 – 2405 – 020		1	SPRING, TORSION ネジリ バネ	
34	FS5 – 2406 – 000		1	SPRING, TORSION ネジリ バネ	
35	FS5 – 2413 – 000		1	SPRING, TENSION ヒッパリ バネ	
36	FS5 – 2479 – 000		1	SPRING, TENSION ヒッパリ バネ	
37	FC1 – 6854 – 000		14	SCREW, M4X8 P タイト ネジ	
38	FA9 – 2753 – 000		5	SCREW,M4X10 P タイト ネジ	
39	FF5 – 2044 – 000	N	1	BODY, CASSETTE カセット オケ	
40	FS5 – 8620 – 000		1	LABEL, PAPER SIZE ヨウシ サイズ ラベル	SEE NOTE
41	FS5 – 8825 – 020		1	LABEL, PAPER LOADING ヨウシ セキサイ ラベル	EXCEPT KOREAN
	FC2 – 3088 – 000		1	LABEL, PAPER LOADING ヨウシ セキサイ ラベル	KOREAN
42	XA9 – 0768 – 000		1	SCREW,M4X8 B タイト ネジ	
501	XB1 – 2400 – 609		8	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XB4 – 6300 – 809		2	SCREW,TAPPING,PAN HEAD,M3X8 ナベ タッピン ネジ	
503	XD2 – 1100 – 642		3	RING,E E リング	
504	XD2 – 2100 – 802		2	RING,GRIP グリップ リング	
505	XD2 – 1100 – 502		4	RING,E E リング	

FIGURE 306 CASSETTE HEATER (LARGE FOR CLC920/950)
カセットヒータ（大 CLC920／950用）

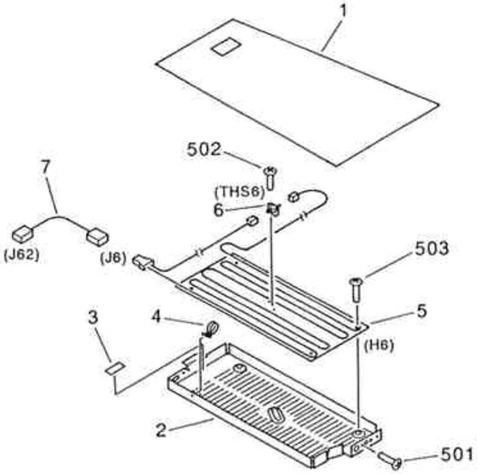


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
306 –	NPN		RF	CASSETTE HEATER, 100V カセット ヒータ (100V)	LARGE FOR CLC920/950 F23 – 7114
	F23 – 7134 – 000		1	CASSETTE HEATER, 115V カセット ヒータ (115V)	LARGE FOR CLC920/950
	F23 – 7144 – 000		1	CASSETTE HEATER, 220V カセット ヒータ (220V)	LARGE FOR CLC920/950
1	FC2 – 0690 – 000		1	SEAL, 1 シール (1)	
2	FC1 – 7605 – 000		1	COVER, HEATER カセット ヒータ カバー	
3	FS9 – 0016 – 000		1	LABEL, "NAME PLATE" メイショウ メイハン	
4	WT2 – 0317 – 000		2	CLIP, CABLE ロッキング ワイヤ サドル	
5	FH7 – 4429 – 000		1	HEATER, ELEMENT ヒータ	100V H6 J6
	FH7 – 4430 – 000		1	HEATER, ELEMENT ヒータ	115/120V H6 J6
	FH7 – 4480 – 000		1	HEATER, ELEMENT ヒータ	220/240V H6 J6
6	FH7 – 7301 – 000		1	THERMOSWITCH サーモスイッチ	THS6
7	FF2 – 9150 – 000		1	CABLE, HEATER ヒータ ソクセン	J6,62
501	XB1 – 2400 – 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XB1 – 2300 – 409		2	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
503	XB1 – 2400 – 409		4	SCREW,MACH.,TRUSS HEAD,M4X4 バインド ネジ	

FIGURE 307 CASSETTE HEATER (SMALL FOR CLC900/920)
カセットヒータ（小 CLC900／920用）

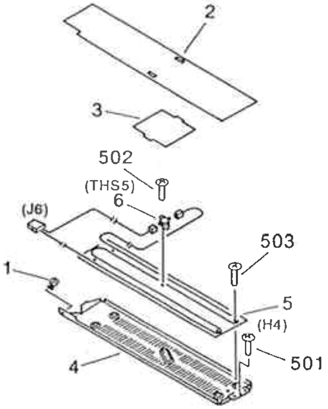
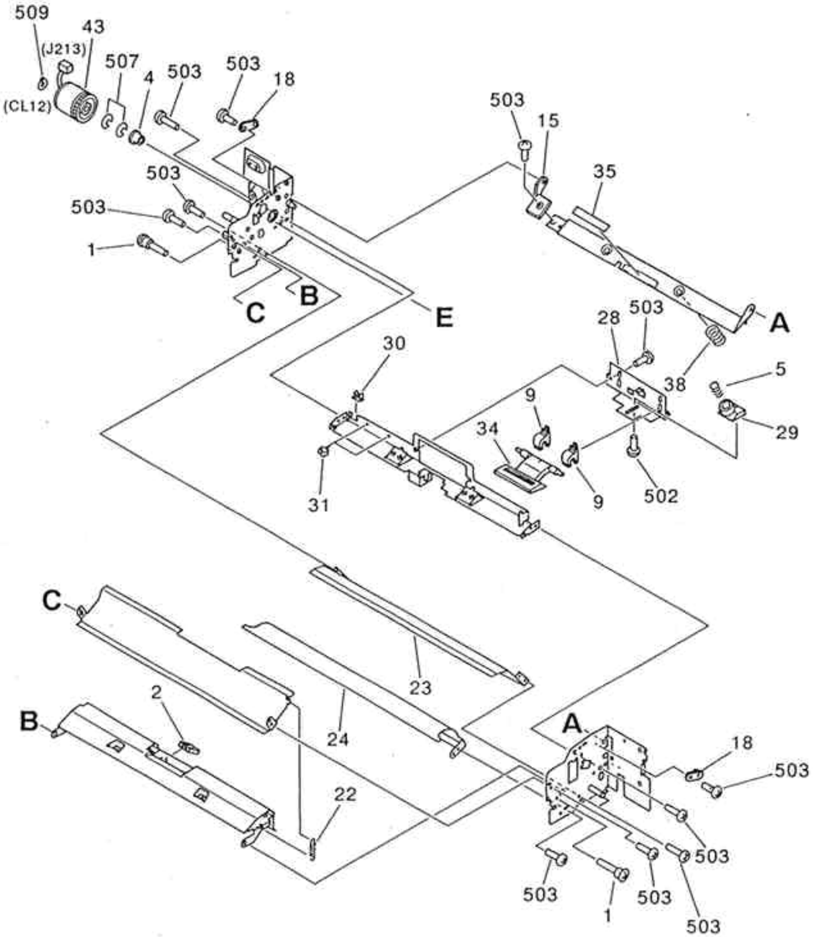


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
307 –	NPN		RF	CASSETTE HEATER, 100V カセット ヒータ (100V)	SMALL FOR CLC900/920 F23 – 7113
	F23 – 7133 – 000		1	CASSETTE HEATER, 115V カセット ヒータ (115V)	SMALL FOR CLC900/920
	F23 – 7143 – 000		1	CASSETTE HEATER, 220V カセット ヒータ (220V)	SMALL FOR CLC900/920
1	WT2 – 5041 – 000		1	TIE, CABLE ソクセン バンド	
2	FC2 – 0697 – 000		1	SEAL, 2 シール (2)	
3	FC2 – 0698 – 000		1	SHEET, INSULATING ゼツエン シート	
4	FC2 – 0695 – 000		1	COVER, HEATER ヒーター カバー	
5	FH7 – 4425 – 000		1	HEATER, ELEMENT ヒータ	100V H4 J6
	FH7 – 4426 – 000		1	HEATER, ELEMENT ヒータ	115/120V H4 J6
	FH7 – 4479 – 000		1	HEATER, ELEMENT ヒータ	220/240V H4 J6
6	FH7 – 7301 – 000		1	THERMOSWITCH サーモスイッチ	THS5
501	XB1 – 2400 – 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB1 – 2400 – 409		4	SCREW,MACH.,TRUSS HEAD,M4X4 バインド ネジ	

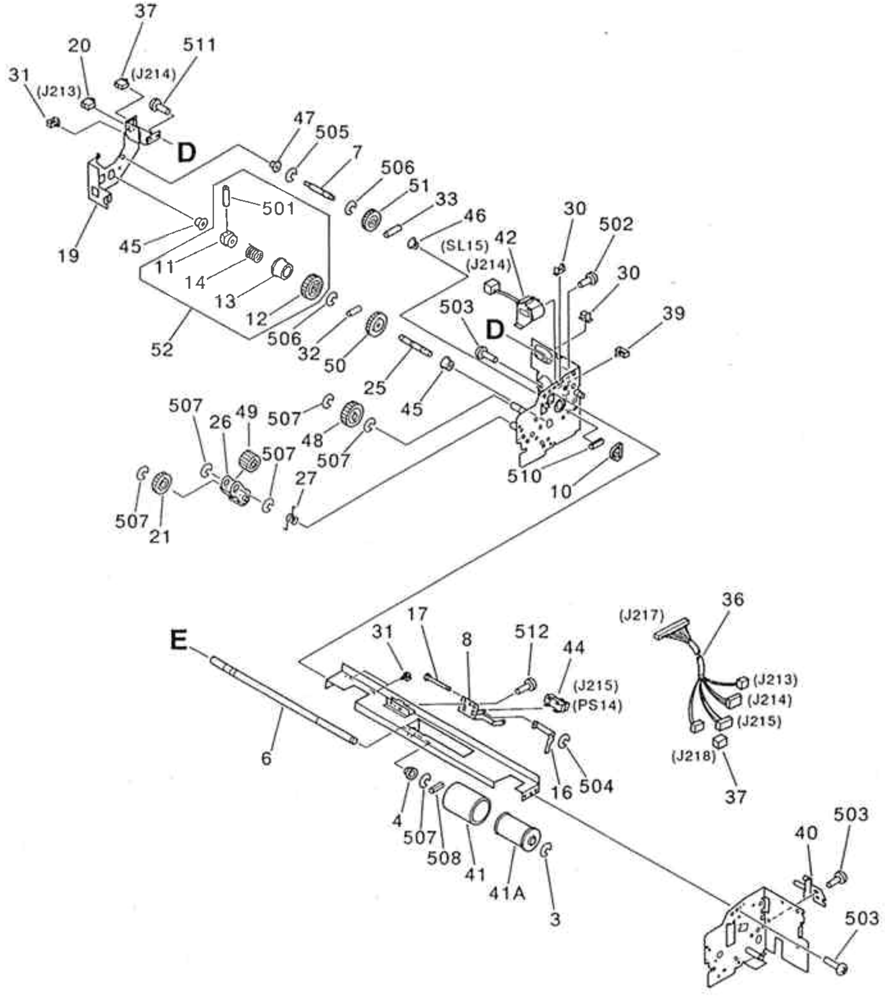
FIGURE 310 MANUAL FEED ASSEMBLY ($^1/_2$)
手差し部 ($^1/_2$)


509
43
(J213)
(CL12)
507
4
503
503
18
503
15
35
503
503
1
B
C
E
A
28
503
38
5
29
30
9
34
9
502
31
C
23
24
2
B
A
18
503
22
503
503
1
503
503

NOTE : This assembly includes the assembly shown in Figure 311.

注 ： このユニットは、 Figure 311のユニットを含みます。

FIGURE 310 MANUAL FEED ASSEMBLY ($^2/_2$)
手差し部 ($^2/_2$)



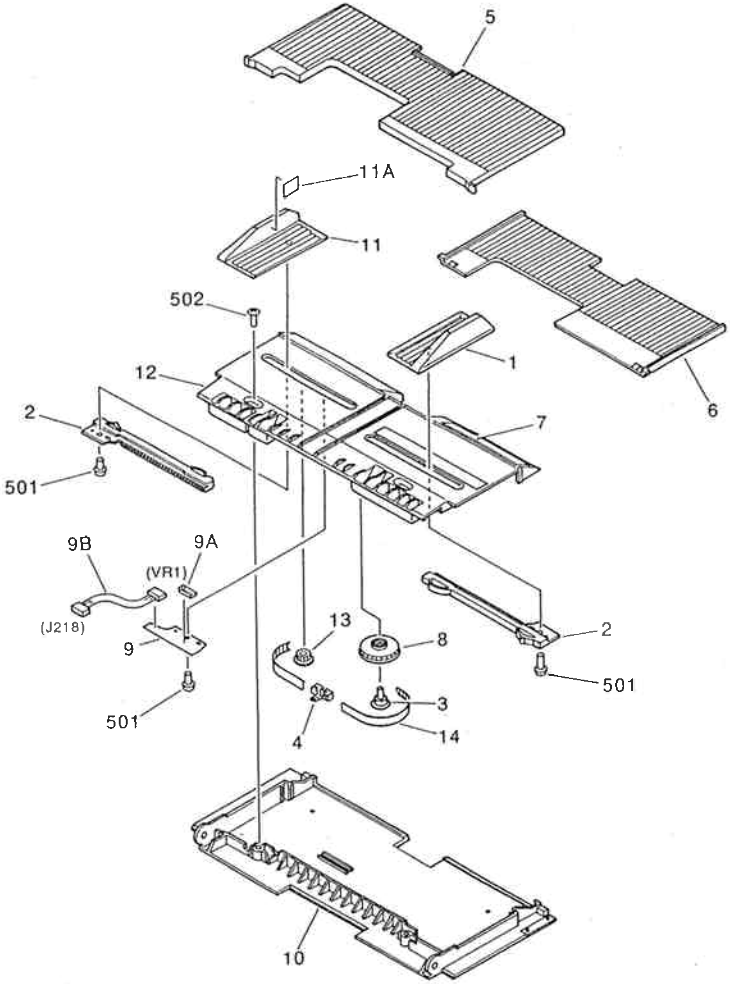
37
20
511
31
(J213)
(J214)
D
47
505
7
506
51
33
46
(SL15)
42
(J214)
30
502
30
39
501
19
45
11
14
13
12
506
32
50
52
503
D
25
45
507
26
49
507
48
507
507
27
510
10
507
21
36
(J217)
17
31
8
512
44
(J215)
(PS14)
(J213)
(J214)
(J215)
(J218)
37
E
6
16
504
4
507
508
41
41A
3
40
503
503

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
310 –	FG5 – 5640 – 120		1	MANUAL FEED ASSEMBLY テサシ ブ	100/115/220/240V SEE NOTE
	FG5 – 8538 – 000		1	MANUAL FEED ASSEMBLY テサシ ブ	120V SEE NOTE
1	FS5 – 9337 – 000		2	SCREW,STEPPED,M4X6 ダン ビス	
2	FB2 – 0971 – 000		1	HANDLE トッテ	
3	FA4 – 1159 – 000		1	RING, RETAINING トメワ	
4	FA9 – 2112 – 000		2	BUSHING ブッシング	
5	FS5 – 2636 – 000		1	SPRING, COMPRESSION アッシュク バネ	
6	FB1 – 8004 – 020		1	SHAFT, ROLLER ローラ ジク	
7	FB1 – 8006 – 000		1	SHAFT, CAM カム ジク	
8	FB1 – 8007 – 000		1	MOUNT, SENSOR センサ シバン	
9	FB1 – 8011 – 000		2	PLATE, ARM アーム ホルダ	
10	FB1 – 8014 – 000		1	CAM, PLATE ナカイタ カム	
11	FB1 – 8015 – 000		1	DRUM, CLUTCH クラッチ ドラム	
12	FB1 – 8016 – 000		1	GEAR, 29T 29T ギア	
13	FB1 – 8017 – 020		1	RING, CLUTCH ACTION セイギョ カン	
14	FB1 – 8018 – 000		1	SPRING, CLUTCH クラッチ バネ	
15	FB1 – 8583 – 000		1	HOLDER, PLATE ナカイタ ホルダ	
16	FB1 – 8587 – 000		1	LEVER, PAPER SENSING カミ ケンチ レバー	
17	FB1 – 8588 – 000		1	SHAFT, PAPER SENSING カミ ケンチ ジク	
18	FB1 – 8761 – 000		2	SHAFT, PLATE ナカイタ シジク	
19	FB2 – 0919 – 000		1	PLATE, MANUAL FEED, DRIVE テサシ クドウ ソクバン	
20	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J213
21	FS5 – 6239 – 000		1	ROLLER ツキアテ コロ	
22	FS5 – 2608 – 000		1	SPRING, TENSION ヒッパリ バネ	
23	FB2 – 0923 – 000		1	PLATE, GUIDE, 1 ゴウリュウ ガイド バン (1)	
24	FB2 – 0924 – 000		1	PLATE, GUIDE, 2 ゴウリュウ ガイド バン (2)	
25	FB2 – 0926 – 000		1	SHAFT, CLUTCH クラッチ ジク	
26	FF5 – 2380 – 000		1	PLATE, SWING ヨウドウ バン	
27	FS5 – 2592 – 000		1	SPRING, TORSION ネジリ バネ	
28	FB1 – 8008 – 000		1	PLATE, HOLDER アーム ホルダ シバン	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
310 – 29	FB1 – 8009 – 000		1	HOLDER, SPRING バネ ホルダ	
30	WT2 – 5035 – 000		3	CLIP, CABLE エッジ サドル	
31	WT2 – 5026 – 000		5	CLIP, CABLE クランプ	
32	XD9 – 0108 – 000		1	PIN,DOWEL ヘイコウ ピン	
33	XD9 – 0103 – 000		1	PIN,DOWEL ヘイコウ ピン	
34	FF5 – 2288 – 060		1	ARM, SEPARATION ブンリ アーム	100/115/220/240V
	FF5 – 4089 – 000		1	ARM, SEPARATION ブンリ アーム	120V
35	FB1 – 8584 – 000		1	SHEET, MANUAL FEED PLATE ナカイタ シート	
36	FG5 – 3148 – 000		1	CABLE, PICK – UP MANUAL テザシ キュウシ ソクセン	J213 – 215,217,218
37	VS1 – 5057 – 003		2	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J214,218
38	FS5 – 2320 – 000		2	SPRING, COMPRESSION アッシュク バネ	
39	WT2 – 5222 – 000		1	HOLD, CABLE ケーブル オサエ	
40	FF5 – 2157 – 000		1	SUPPORT, TRAY, FRONT トレイ シバン (マエ)	
41	FF5 – 2287 – 000		1	ROLLER, MULTI マルチ ローラ	
41A	FB2 – 0974 – 000		1	SHAFT,MULTI マルチ ローラ ジク	
42	FH7 – 5377 – 000		1	SOLENOID, DC24V ソレノイド	SL15 J214
43	FH7 – 5475 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL12 J213
44	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS14 J215
45	FS1 – 1190 – 000		2	BUSHING ブッシング	
46	FS1 – 1346 – 000		1	BUSHING ブッシング	
47	FS1 – 1376 – 000		1	BUSHING ブッシング	
48	FS2 – 0441 – 000		1	GEAR, 28T 28T ギア	
49	FS3 – 0166 – 000		1	GEAR, 20T 20T ギア	
50	FS5 – 0522 – 000		1	GEAR, 26T 26T ギア	
51	FS5 – 0523 – 000		1	GEAR, 26T 26T ギア	
52	FG5 – 7344 – 000		1	MANUAL FEED CLUTCH ASSEMBLY テザシ クラッチ ブ	
501	XB6 – 2300 – 608		2	SETSCREW,M3X6 ロッカク アナツキ トメネジ	
502	XB1 – 2300 – 609		3	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
504	XD2 – 1100 – 242		1	RING,E E リング	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
310 – 505	XD2 – 1100 – 322		1	RING,E E リング	
506	XD2 – 1100 – 502		3	RING,E E リング	
507	XD2 – 1100 – 642		AR	RING,E E リング	
508	XD3 – 1160 – 142		1	PIN,SPRING スプリング ピン	
509	XD2 – 2100 – 802		1	RING,GRIP グリップ リング	
510	XD3 – 1160 – 102		1	PIN,SPRING スプリング ピン	
511	XB1 – 2400 – 406		2	SCREW,MACH.,TRUSS HEAD,M4X4 バインド ネジ	
512	XB1 – 2300 – 409		1	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	

FIGURE 311 MULTI FEED TRAY ASSEMBLY
マルチ手差しトレイ部


5
11A
11
502
1
12
6
2
7
501
9B
9A
(VR1)
(J218)
13
8
2
9
501
3
501
4
14
10

NOTE 1 : This assembly is included in the assembly shown in Figure 310.

NOTE 2 : This assembly does not include the part shown with key No. 7.

注1 ： このユニットは、 Figure 310 のユニットに含まれます。

注2 ： このユニットに、 Key No. 7の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
311 –	FG5 – 5641 – 000		1	MULTI FEED TRAY ASSEMBLY マルチ テサシ トレイ ブ	SEE NOTE 1
1	FB1 – 8617 – 000		1	PANEL, LIMIT, FRONT サイド キセイ バン (マエ)	
2	FB1 – 8619 – 000		2	RACK ラック バン	
3	FB1 – 8620 – 000		1	RING, PULLEY プーリ リング	
4	FB1 – 8621 – 000		1	PLATE, LOCK ベルト ロック イタ	
5	FB2 – 9160 – 000		1	TRAY, SLIDE, 1 スライド トレイ (1)	
6	FB1 – 8623 – 000		1	TRAY, SLIDE, 2 スライド トレイ (2)	
7	FS5 – 8805 – 000		1	LABEL, "MANUAL FEED" テサシ サイズ ラベル	AB SIZE SEE NOTE 2
	FS5 – 8807 – 000		1	LABEL, "MANUAL FEED" テサシ サイズ ラベル	A/INCH SIZE SEE NOTE 2
	FS5 – 8808 – 000		1	LABEL, "MANUAL FEED" テサシ サイズ ラベル	A SIZE SEE NOTE 2
	FS5 – 8806 – 000		1	LABEL, "MANUAL FEED" テサシ サイズ ラベル	AB/INCH SIZE SEE NOTE 2
8	FB1 – 8625 – 000		1	GEAR, 18T 18T ギア	
9	FG5 – 1958 – 000		1	MULTI VR PCB ASSEMBLY マルチ VR キバン ブ	
9A	VR9 – 5138 – 000		1	RESISTOR, VARIABLE, 10KOHM カヘン テイコウ	VR1
9B	FG5 – 1946 – 000		1	CABLE, MULTI VR マルチ VR ソクセン	J218
10	FF5 – 1186 – 000		1	TRAY 2 トレイ (2)	
11	FF5 – 1224 – 000		1	PANEL, LIMIT, REAR サイド キセイ バン (ウシロ)	
11A	FS5 – 8616 – 000		1	LABEL, "LIMIT, PAPER HEIGHT" セキサイ ゲンカイ ラベル	
12	FB1 – 8616 – 000		1	TRAY トレイ	
13	FS5 – 3177 – 000		1	PULLEY, IDLER アイドラ プーリ	
14	XF9 – 0393 – 000		1	BELT, TIMING タイミング ベルト	
501	XB4 – 7300 – 609		3	SCREW,TAPPING,TRUSS HEAD,M3X6 バインド タッピン ネジ	
502	XB4 – 7401 – 007		2	SCREW,TAPPING,TRUSS HEAD,M4X10 バインド タッピン ネジ	

FIGURE 312 UPPER PAPER PICK-UP ASSEMBLY (1/2)
上段給紙部 (1/2)

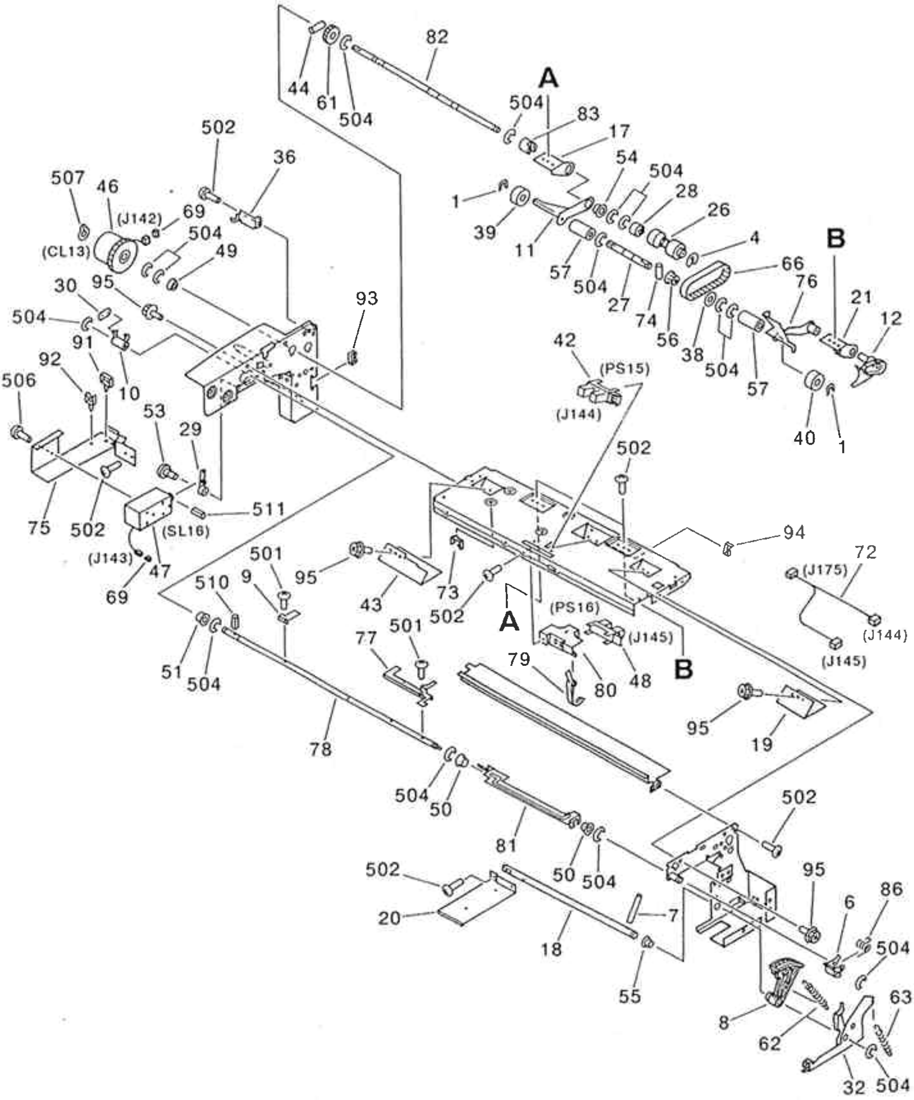

82
44
61
504
A
504
83
17
502
36
507
46
(J142)
69
504
49
(CL13)
54
504
28
1
39
11
26
57
504
27
4
B
66
76
74
56
38
504
57
21
12
40
1
30
95
504
91
10
92
506
93
42
(PS15)
(J144)
53
29
75
502
511
(SL16)
(J143)
47
69
502
94
72
(J175)
(J144)
(J145)
501
9
510
95
43
73
502
A
(PS16)
(J145)
48
B
51
504
77
501
79
80
95
19
78
504
50
81
502
502
50
504
95
20
18
7
86
6
504
55
8
62
63
32
504

FIGURE 312 UPPER PAPER PICK-UP ASSEMBLY ($^2/_2$)
上段給紙部 ($^2/_2$)

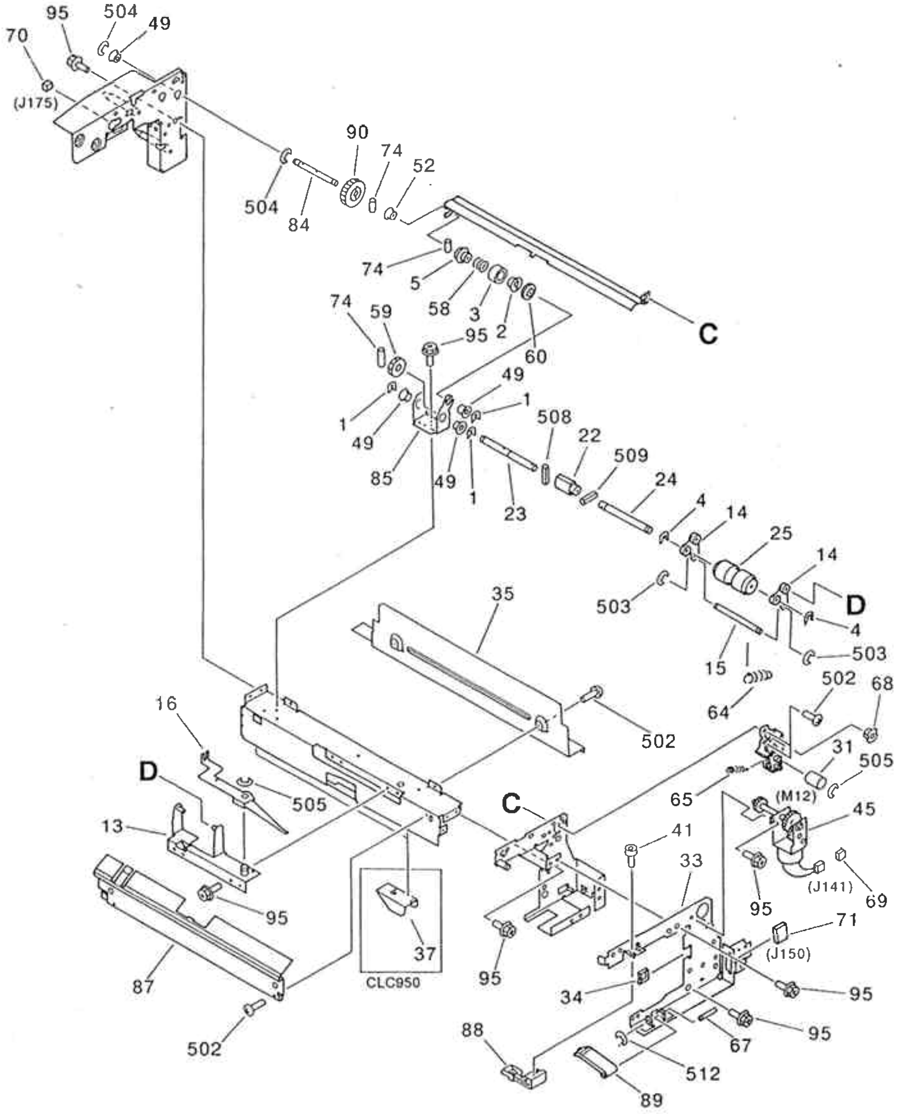

95
504
49
70
(J175)
90
74
52
504
84
74
5
58
3
2
60
C
74
59
95
49
1
1
49
85
49
1
508
22
509
24
23
4
14
25
14
503
D
4
503
35
15
64
502
68
502
16
31
505
D
505
65
(M12)
45
C
13
41
33
95
(J141)
69
95
71
95
(J150)
87
37
CLC950
95
34
95
95
67
502
88
512
89

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
312 –	FG5 – 5642 – 060		1	UPPER PAPER PICK – UP ASSEMBLY ジョウダン キュウシ ブ	CLC900/920
	FG5 – 5977 – 060		1	UPPER PAPER PICK – UP ASSEMBLY ジョウダン キュウシ ブ	CLC950
1	FA3 – 8727 – 000		5	RING, RETAINING トメ ワ	
2	FA3 – 8729 – 000		1	DRUM, CLUTCH DRIVING クラッチ ドラム	
3	FA3 – 8730 – 000		1	CASE, CLUTCH ACTION クラッチ ケース	
4	FA5 – 2864 – 020		3	RING, RETAINING トメワ	
5	FA5 – 2865 – 000		1	DRUM, CLUTCH DRIVE ニュウリョク ドラム	
6	FA5 – 2872 – 000		1	ARM, RELEASE, ROLLER, FRONT キュウシ ローラ カイジョ アーム (マエ)	
7	FA5 – 2924 – 000		1	PIN,DOWEL ヘイコウ ピン	
8	FB1 – 6980 – 020		1	GEAR, 16T 16T ギア	
9	FB1 – 6985 – 000		1	PLATE, PICK – UP ROLLER, CENTER ピックアップ ローラ バン (ナカ)	
10	FB1 – 6988 – 000		1	CAM, PICK – UP ROLLER, REAR ピックアップ ローラ カム (ウシロ)	
11	FB2 – 0866 – 000		1	ARM, PICK – UP ROLLER, REAR ピックアップ ローラ アーム (ウシロ)	
12	FB2 – 0865 – 030		1	SUPPORT, PICK – UP ROLLER ピック アップ ローラ ササエ	
13	FF5 – 1111 – 000		1	MOUNT, SEPARATION ROLLER ブンリ ローラ ダイ	
14	FB1 – 6999 – 000		2	ARM, SEPARATION ROLLER ブンリ ローラ アーム	
15	FC1 – 4939 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ カウンタ ジク	
16	FB1 – 7001 – 020		1	PLATE, RELEASE, SEPARATION ブンリ ローラ カイジョ リンク	
17	FB1 – 7016 – 000		1	PLATE, ROLLER HOLDING, REAR ハンソウ ローラ ジク シダイ (ウシロ)	
18	FB1 – 7021 – 040		1	SHAFT, LIFTING カアツ ジク	
19	FB2 – 0867 – 000		1	GUIDE, SUPPORT, FRONT ホジョ ガイド (マエ)	
20	FB1 – 7032 – 000		1	PLATE, LIFTING カアツ バン	
21	FB1 – 7048 – 000		1	PLATE, ROLLER HOLDING, FRONT ハンソウ ローラ ジク シダイ (マエ)	
22	FB1 – 7049 – 000		1	JOINT ジョイント	
23	FB1 – 7051 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ クドウ ジク	
24	FB1 – 7059 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ ジク	
25	FB1 – 7060 – 020		1	ROLLER, SEPARATION ブンリ ローラ	
26	FB1 – 7061 – 000		1	ROLLER, FEEDER ハンソウ ローラ	
27	FB1 – 7062 – 000		1	SHAFT, PICK – UP ROLLER ピックアップ ローラ ジク	
28	FB1 – 7064 – 000		1	PULLEY, ONE – WAY ワンウェイ プーリ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
312 – 29	FB1 – 7065 – 000		1	LEVER, SOLENOID ソレノイド レバー	
30	FB1 – 7066 – 000		1	PLATE, CONNECTING レンケツ バン	
31	FB3 – 6007 – 000		1	COLLAR カラー	
32	FB2 – 0880 – 000		1	ARM, RELEASE リフタ カイジョ アーム	
33	FB2 – 0949 – 020		1	PLATE, POSITIONING イチ キメ バン	
34	WT2 – 0241 – 000		1	CLIP, CABLE エッジ サドル	
35	FB2 – 0978 – 030		1	PLATE, ARM STOPPER アーム ストッパ	
36	FB2 – 0952 – 000		1	PLATE, CLUTCH STOP クラッチ ドメ イタ	
37	FB2 – 0954 – 000		2	CLAMP, FEED ハンソウ ブ オサエ	CLC950
38	FC1 – 4882 – 000		1	FLANGE, PULLEY プーリ フランジ	
39	FF5 – 1220 – 000		1	ROLLER, PICK – UP, FRONT ピックアップ ローラ (マエ)	
40	FF5 – 1221 – 000		1	ROLLER, PICK – UP, REAR ピックアップ ローラ (ウシロ)	
41	XA9 – 0818 – 000		1	SCREW,ALLEN HEAD,M4X6 ロッカク アナツキ ボルト	
42	FH7 – 7326 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS15 J144
43	FB2 – 8926 – 000		1	GUIDE, SUPPORT, REAR ホジョ ガイド (ウシロ)	
44	XD9 – 0108 – 000		1	PIN,DOWEL ヘイコウ ピン	
45	FH6 – 1021 – 000		1	MOTOR, DC 24V モータ	M12 J141
46	FH7 – 5371 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL13 J142
47	FH7 – 5379 – 000		1	SOLENOID, DC24V ソレノイド	SL16 J143
48	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS16 J145
49	FS1 – 1190 – 000		5	BUSHING ブッシング	
50	FS1 – 1512 – 000		2	BUSHING ブッシング	
51	FS1 – 1206 – 000		1	BUSHING ブッシング	
52	FS1 – 1346 – 000		1	BUSHING ブッシング	
53	FS5 – 9210 – 000		1	SCREW,STEPPED,M4 ダンビス	
54	FS5 – 1220 – 000		1	BUSHING ブッシング	
55	FS2 – 1008 – 000		1	BUSHING ブッシング	
56	FS2 – 3004 – 000		1	PULLEY, PICK – UP ROLLER キュウシ プーリ	
57	FB1 – 7046 – 000		2	SPACER, WEIGHT ウエイト カラー	
58	FS3 – 2008 – 000		1	SPRING, CLUTCH クラッチ バネ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
312 – 59	FS5 – 0393 – 000		1	GEAR, 30T 30T ギア	
60	FS5 – 0394 – 000		1	GEAR, 30T 30T ギア	
61	FS5 – 0395 – 000		1	GEAR, 25T 25T ギア	
62	FS5 – 2286 – 000		1	SPRING, TENSION ヒッパリ バネ	
63	FS5 – 2287 – 000		1	SPRING, TENSION ヒッパリ バネ	
64	FS5 – 2293 – 000		1	SPRING, TENSION ヒッパリ バネ	
65	FS5 – 2622 – 000		1	SPRING, TENSION ヒッパリ バネ	
66	XF9 – 0094 – 000		1	BELT, TIMING タイミング ベルト	
67	FA3 – 8719 – 000		1	ROD, SIDE サイド キセイ ジク	
68	FS5 – 1219 – 000		1	BUSHING ブッシング	
69	VS1 – 5057 – 002		3	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J141 – 143
70	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J175
71	VS1 – 5057 – 012		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J150
72	FG5 – 3158 – 000		1	CABLE, PICK – UP SENSOR キュウシ センサ ソクセン	J144,145,175
73	WT2 – 5222 – 000		4	HOLD, CABLE ケーブル オサエ	
74	XD9 – 0103 – 000		4	PIN,DOWEL ヘイコウ ピン	
75	FB2 – 0806 – 000		1	COVER, SOLENOID ソレノイド カバー	
76	FB2 – 0815 – 020		1	ARM, PICK – UP ROLLER, FRONT ピック アップ ローラ アーム（マエ）	
77	FB2 – 8922 – 000		1	PLATE, PICK – UP ピック アップ バン	
78	FB2 – 8923 – 000		1	SHAFT, PICK – UP ピック アップ ジク	
79	FB2 – 0821 – 000		1	LEVER, PAPER SENSOR カミ ケンチ レバー	
80	FB2 – 0822 – 000		1	MOUNT, PAPER SENSOR カミ ケンチ センサ シバン	
81	FB2 – 0823 – 000		1	PLATE, RELEASE カイジョ バン	
82	FB2 – 0824 – 000		1	SHAFT, ROLLER FEED ハンソウ ローラ ジク	
83	FB2 – 0825 – 000		1	BUSHING ブッシング	
84	FB2 – 0826 – 000		1	SHAFT, GEAR ギア ジク	
85	FB2 – 0827 – 000		1	MOUNT, GEAR, SEPARATION ブンリ ギア シダイ	
86	FB2 – 0829 – 000		1	SPRING, TORSION ネジリ バネ	
87	FB2 – 0861 – 000		1	GUIDE, PICK – UP キュウシ ガイド	
88	FF5 – 2389 – 000		1	HOOK, REGISTRATION, SIDE ヨコレジ フック	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
312 – 89	FB2 – 0957 – 010		1	LEVER, LIFTER RELEASE リフタ カイジョ レバー	
90	FS5 – 0721 – 000		1	GEAR, 31T 31T ギア	
91	WT2 – 5212 – 000		1	CLAMP, CABLE, MINI ミニ クランプ	
92	WT2 – 0495 – 000		7	CLAMP, CABLE ケーブル クランプ	
93	WT2 – 5011 – 000		2	CLIP, CABLE エッジ サドル	
94	WT2 – 5300 – 000		1	CLIP, CABLE エッジ サドル	
95	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
501	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XD2 – 1100 – 242		2	RING,E E リング	
504	XD2 – 1100 – 502		AR	RING,E E リング	
505	XD2 – 1100 – 642		AR	RING,E E リング	
506	XB1 – 2300 – 409		3	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
507	XD2 – 2100 – 602		1	RING,GRIP グリップ リング	
508	XD3 – 1200 – 102		1	PIN,SPRING スプリング ピン	
509	XD3 – 1200 – 122		1	PIN,SPRING スプリング ピン	
510	XD3 – 1300 – 102		1	PIN,SPRING スプリング ピン	
511	XD3 – 1200 – 082		1	PIN,SPRING スプリング ピン	
512	XD2 – 1100 – 322		1	RING,E E リング	

FIGURE 313

MIDDLE PAPER PICK-UP ASSEMBLY(CLC900) (1/2)
中段給紙部（CLC900）（1/2）

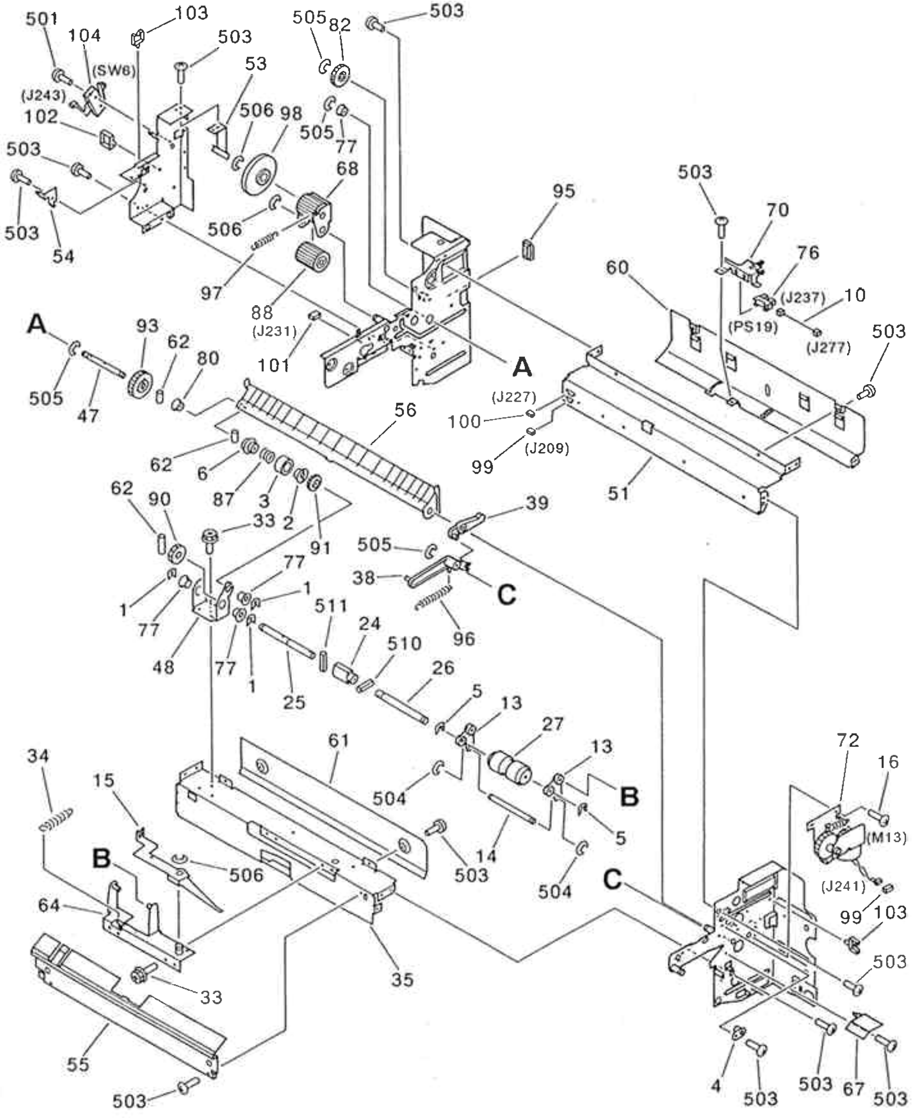

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FIGURE 313

MIDDLE PAPER PICK-UP ASSEMBLY(CLC900) ($^{2}/_{2}$)

中段給紙部（CLC900）（$^{2}/_{2}$）

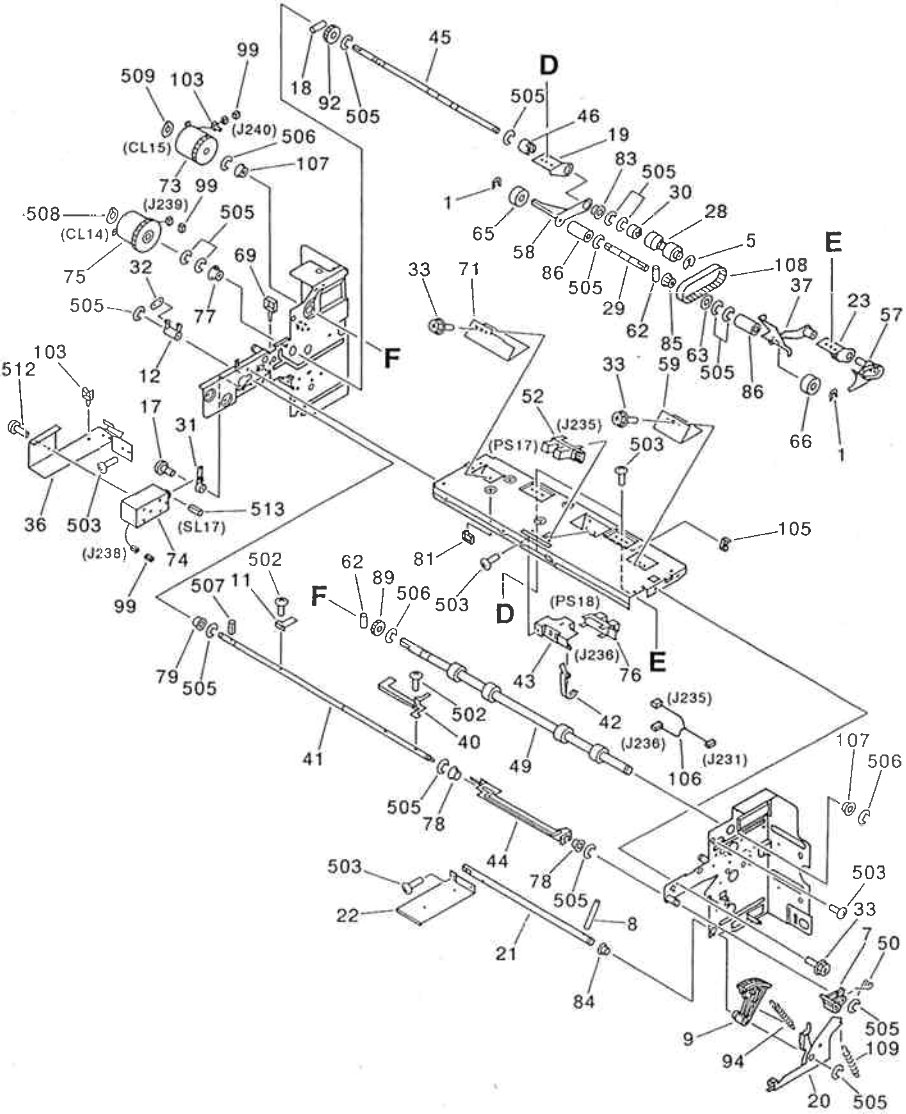

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FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
313 –	FG5 – 5643 – 040		1	MIDDLE PAPER PICK – UP ASSEMBLY チュウダン キュウシ ブ	CLC900
1	FA3 – 8727 – 000		5	RING, RETAINING トメ ワ	
2	FA3 – 8729 – 000		1	DRUM, CLUTCH DRIVING クラッチ ドラム	
3	FA3 – 8730 – 000		1	CASE, CLUTCH ACTION クラッチ ケース	
4	FA4 – 1149 – 000		1	PIN, PLATE ゼツエン ピン	
5	FA5 – 2864 – 020		3	RING, RETAINING トメワ	
6	FA5 – 2865 – 000		1	DRUM, CLUTCH DRIVE ニュウリョク ドラム	
7	FA5 – 2872 – 000		1	ARM, RELEASE, ROLLER, FRONT キュウシ ローラ カイジョ アーム (マエ)	
8	FA5 – 2924 – 000		1	PIN,DOWEL ヘイコウ ピン	
9	FB1 – 6980 – 020		1	GEAR, 16T 16T ギア	
10	FG5 – 3209 – 000		1	CABLE, VERTICAL PATH, 1 キュウシ タテパス ソクセン (1)	J237,277
11	FB1 – 6985 – 000		1	PLATE, PICK – UP ROLLER, CENTER ピックアップ ローラ バン (ナカ)	
12	FB1 – 6988 – 000		1	CAM, PICK – UP ROLLER, REAR ピックアップ ローラ カム (ウシロ)	
13	FB1 – 6999 – 000		2	ARM, SEPARATION ROLLER ブンリ ローラ アーム	
14	FC1 – 4939 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ カウンタ ジク	
15	FB1 – 7001 – 020		1	PLATE, RELEASE, SEPARATION ブンリ ローラ カイジョ リンク	
16	XA9 – 0626 – 000		2	SCREW,RS,M3X6 RS タイト ネジ	
17	FS5 – 9210 – 000		1	SCREW,STEPPED,M4 ダンビス	
18	XD9 – 0108 – 000		1	PIN,DOWEL ヘイコウ ピン	
19	FB1 – 7016 – 000		1	PLATE, ROLLER HOLDING, REAR ハンソウ ローラ ジク シダイ (ウシロ)	
20	FB2 – 0880 – 000		1	ARM, RELEASE リフタ カイジョ アーム	
21	FB1 – 7021 – 040		1	SHAFT, LIFTING カアツ ジク	
22	FB1 – 7032 – 000		1	PLATE, LIFTING カアツ バン	
23	FB1 – 7048 – 000		1	PLATE, ROLLER HOLDING, FRONT ハンソウ ローラ ジク シダイ (マエ)	
24	FB1 – 7049 – 000		1	JOINT ジョイント	
25	FB1 – 7051 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ クドウ ジク	
26	FB1 – 7059 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ ジク	
27	FB1 – 7060 – 020		1	ROLLER, SEPARATION ブンリ ローラ	
28	FB1 – 7061 – 000		1	ROLLER, FEEDER ハンソウ ローラ	
29	FB1 – 7062 – 000		1	SHAFT, PICK – UP ROLLER ピックアップ ローラ ジク	

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
313 –	30	FB1 – 7064 – 000		1	PULLEY, ONE – WAY ワンウェイ プーリ	
	31	FB1 – 7065 – 000		1	LEVER, SOLENOID ソレノイド レバー	
	32	FB1 – 7066 – 000		1	PLATE, CONNECTING レンケツ バン	
	33	XA9 – 0629 – 000		22	SCREW,RS,M4X8 RS タイト ネジ	
	34	FS5 – 2293 – 000		1	SPRING, TENSION ヒッパリ バネ	
	35	FB2 – 0804 – 000		1	CROSSMEMBER, LOWER シタ ステイ	
	36	FB2 – 0806 – 000		1	COVER, SOLENOID ソレノイド カバー	
	37	FB2 – 0815 – 020		1	ARM, PICK – UP ROLLER, FRONT ピック アップ ローラ アーム (マエ)	
	38	FB2 – 0817 – 000		1	LINK, PICK – UP, 1 ピック アップ リンク (1)	
	39	FB2 – 0818 – 000		1	LINK, PICK – UP, 2 ピック アップ リンク (2)	
	40	FB2 – 8922 – 000		1	PLATE, PICK – UP ピック アップ バン	
	41	FB2 – 8923 – 000		1	SHAFT, PICK – UP ピック アップ ジク	
	42	FB2 – 0821 – 000		1	LEVER, PAPER SENSOR カミ ケンチ レバー	
	43	FB2 – 0822 – 000		1	MOUNT, PAPER SENSOR カミ ケンチ センサ シバン	
	44	FB2 – 0823 – 000		1	PLATE, RELEASE カイジョ バン	
	45	FB2 – 0824 – 000		1	SHAFT, ROLLER FEED ハンソウ ローラ ジク	
	46	FB2 – 0825 – 000		1	BUSHING ブッシング	
	47	FB2 – 0826 – 000		1	SHAFT, GEAR ギア ジク	
	48	FB2 – 0827 – 000		1	MOUNT, GEAR, SEPARATION ブンリ ギア シダイ	
	49	FB2 – 0828 – 000		1	ROLLER, DRIVE, VERTICAL PATH タテパス クドウ ローラ	
	50	FB2 – 0829 – 000		1	SPRING, TORSION ネジリ バネ	
	51	FB2 – 0835 – 000		1	CROSSMEMBER, 2 ステイ (2)	
	52	FH7 – 7326 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS17 J235
	53	FB2 – 8924 – 000		1	SUPPORT, SWITCH スイッチ オシバン	
	54	FB2 – 0860 – 000		1	PLATE, CLUTCH STOP クラッチ ドメ	
	55	FB2 – 0861 – 000		1	GUIDE, PICK – UP キュウシ ガイド	
	56	FB2 – 0864 – 000		1	GUIDE, OPEN オープン ガイド	
	57	FB2 – 0865 – 030		1	SUPPORT, PICK – UP ROLLER ピック アップ ローラ ササエ	
	58	FB2 – 0866 – 000		1	ARM, PICK – UP ROLLER, REAR ピックアップ ローラ アーム (ウシロ)	
	59	FB2 – 0867 – 000		1	GUIDE, SUPPORT, FRONT ホジョ ガイド (マエ)	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
313 – 60	FB2 – 0893 – 000		1	PLATE, GUIDE, UPPER タテパス ガイド (ウエ)	
61	FB2 – 0894 – 020		1	PLATE, GUIDE, LOWER タテパス ガイド (シタ)	
62	XD9 – 0103 – 000		5	PIN,DOWEL ヘイコウ ピン	
63	FC1 – 4882 – 000		1	FLANGE, PULLEY プーリ フランジ	
64	FF5 – 1111 – 000		1	MOUNT, SEPARATION ROLLER ブンリ ローラ ダイ	
65	FF5 – 1220 – 000		1	ROLLER, PICK – UP, FRONT ピックアップ ローラ (マエ)	
66	FF5 – 1221 – 000		1	ROLLER, PICK – UP, REAR ピックアップ ローラ (ウシロ)	
67	FF5 – 2093 – 000		1	PIN, GUIDE ガイド ピン	
68	FF5 – 2098 – 000		1	ARM, INPUT ニュウリョク アーム	
69	WT2 – 5212 – 000		1	CLAMP, CABLE, MINI ミニ クランプ	
70	FF5 – 5708 – 000		1	LEVER, SENSING ケンチ レバー	
71	FB2 – 8926 – 000		1	GUIDE, SUPPORT, REAR ホジョ ガイド (ウシロ)	
72	FH6 – 1022 – 000		1	MOTOR, DC 24V モータ	M13 J241
73	FH7 – 5372 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL15 J240
74	FH7 – 5379 – 000		1	SOLENOID, DC24V ソレノイド	SL17 J238
75	FH7 – 5422 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL14 J239
76	FH7 – 7312 – 000		2	PHOTO – INTERRUPTER フォトインタラプタ	PS18,19 J236,237
77	FS1 – 1190 – 000		5	BUSHING ブッシング	
78	FS1 – 1512 – 000		2	BUSHING ブッシング	
79	FS1 – 1206 – 000		1	BUSHING ブッシング	
80	FS1 – 1346 – 000		1	BUSHING ブッシング	
81	WT2 – 5222 – 000		4	HOLD, CABLE ケーブル オサエ	
82	FS2 – 0544 – 000		1	GEAR, 24T 24T ギア	
83	FS2 – 1008 – 000		1	BUSHING ブッシング	
84	FS5 – 1220 – 000		1	BUSHING ブッシング	
85	FS2 – 3004 – 000		1	PULLEY, PICK – UP ROLLER キュウシ プーリ	
86	FB1 – 7046 – 000		2	SPACER, WEIGHT ウエイト カラー	
87	FS3 – 2008 – 000		1	SPRING, CLUTCH クラッチ バネ	
88	FS4 – 0156 – 000		1	GEAR, 24T 24T ギア	
89	FS5 – 0338 – 000		1	GEAR, 16T 16T ギア	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
313 – 90	FS5 – 0393 – 000		1	GEAR, 30T 30T ギア	
91	FS5 – 0394 – 000		1	GEAR, 30T 30T ギア	
92	FS5 – 0395 – 000		1	GEAR, 25T 25T ギア	
93	FS5 – 0721 – 000		1	GEAR, 31T 31T ギア	
94	FS5 – 2286 – 000		1	SPRING, TENSION ヒッパリ バネ	
95	WT2 – 5062 – 000		1	BUSHING, SQUARE スクエア ブッシュ	
96	FS5 – 2556 – 000		1	SPRING, TENSION ヒッパリ バネ	
97	FS5 – 2558 – 000		1	SPRING, TENSION ヒッパリ バネ	
98	FS5 – 6243 – 000		1	ROLLER コロ	
99	VS1 – 5057 – 002		5	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J209,238 – 241
100	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J227
101	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J231
102	WT2 – 0262 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
103	WT2 – 0495 – 000		21	CLAMP, CABLE ケーブル クランプ	
104	WC4 – 5023 – 000		1	MICRO SWITCH マイクロ スイッチ	SW6 J243
105	WT2 – 5300 – 000		1	CLIP, CABLE エッジ サドル	
106	FG5 – 3158 – 000		1	CABLE, PICK – UP SENSOR キュウシ センサ ソクセン	J231,235,236
107	FS5 – 1508 – 000		2	BALL BEARING ボール ベアリング	
108	XF9 – 0094 – 000		1	BELT, TIMING タイミング ベルト	
109	FS5 – 2287 – 000		1	SPRING, TENSION ヒッパリ バネ	
501	XB1 – 2231 – 009		1	SCREW,MACH.,TRUSS HEAD,M2.3X10 バインド ネジ	
502	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
504	XD2 – 1100 – 242		2	RING,E E リング	
505	XD2 – 1100 – 502		AR	RING,E E リング	
506	XD2 – 1100 – 642		8	RING,E E リング	
507	XD3 – 1200 – 082		1	PIN,SPRING スプリング ピン	
508	XD2 – 2100 – 602		1	RING,GRIP グリップ リング	
509	XD2 – 2100 – 802		1	RING,GRIP グリップ リング	
510	XD3 – 1200 – 102		1	PIN,SPRING スプリング ピン	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
313 – 511	XD3 – 1200 – 122		1	PIN,SPRING スプリング ピン	
512	XB1 – 2300 – 409		3	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
513	XD3 – 1300 – 102		1	PIN,SPRING スプリング ピン	

FIGURE 313A MIDDLE PAPER PICK-UP ASSEMBLY (CLC920) (1/2)
中段給紙部 (CLC920) (1/2)

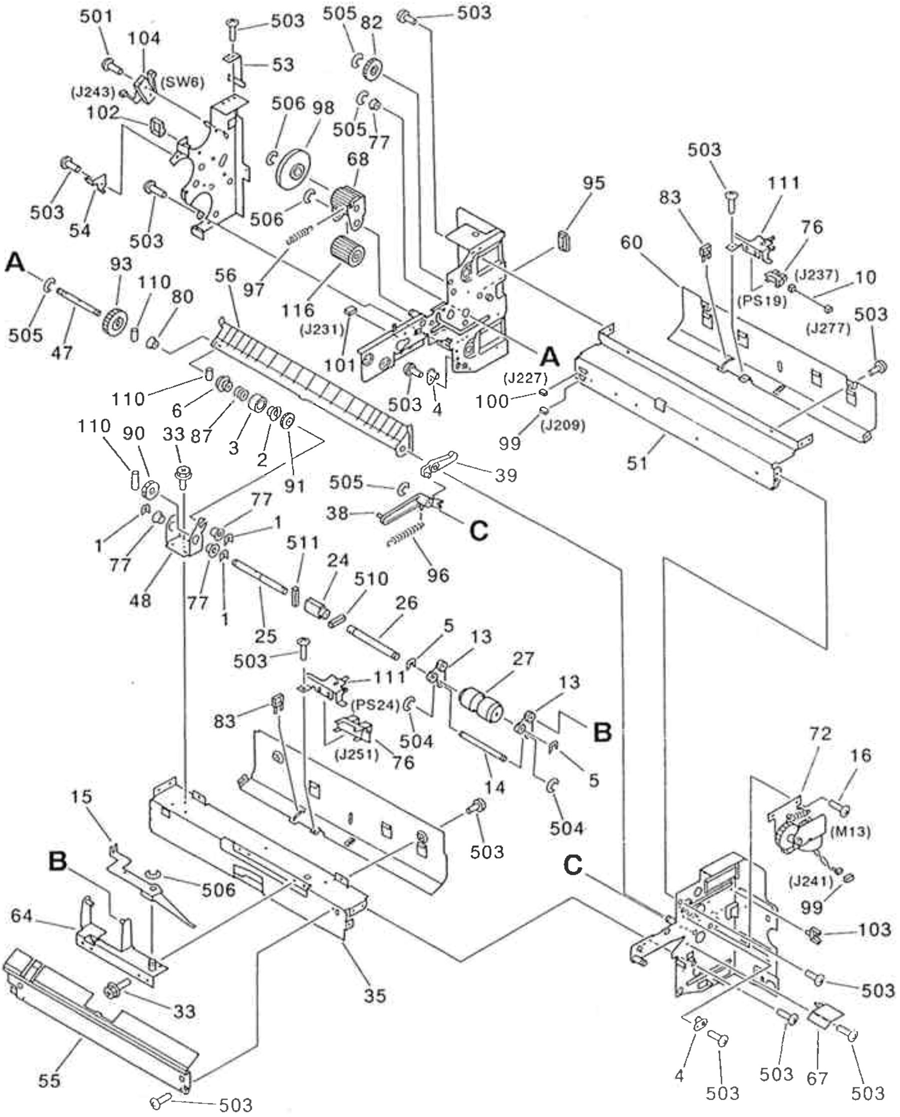
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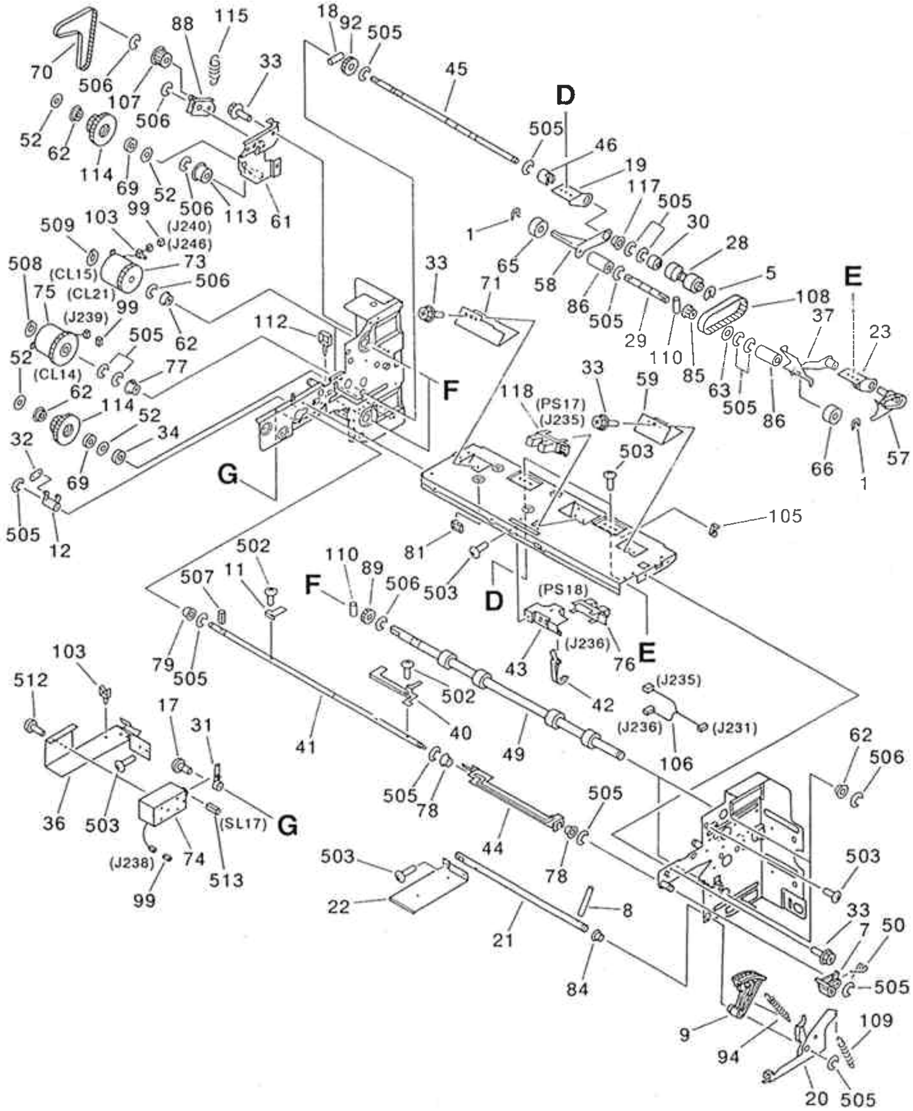
FIGURE 313A MIDDLE PAPER PICK-UP ASSEMBLY (CLC920) ($^2/_2$)

中段給紙部 (CLC920) ($^2/_2$)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94
109
20
505

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
313A -	FG5 - 7423 - 000		1	MIDDLE PAPER PICK - UP ASSEMBLY チュウダン キュウシ ブ	CLC920
1	FA3 - 8727 - 000		5	RING, RETAINING トメ ワ	
2	FA3 - 8729 - 000		1	DRUM, CLUTCH DRIVING クラッチ ドラム	
3	FA3 - 8730 - 000		1	CASE, CLUTCH ACTION クラッチ ケース	
4	FA4 - 1149 - 000		2	PIN, PLATE ゼツエン ピン	
5	FA5 - 2864 - 020		3	RING, RETAINING トメワ	
6	FA5 - 2865 - 000		1	DRUM, CLUTCH DRIVE ニュウリョク ドラム	
7	FA5 - 2872 - 000		1	ARM, RELEASE, ROLLER, FRONT キュウシ ローラ カイジョ アーム (マエ)	
8	FA5 - 2924 - 000		1	PIN,DOWEL ヘイコウ ピン	
9	FB1 - 6980 - 020		1	GEAR, 16T 16T ギア	
10	FG5 - 3209 - 000		1	CABLE, VERTICAL PATH, 1 キュウシ タテパス ソクセン (1)	J237,277
11	FB1 - 6985 - 000		1	PLATE, PICK - UP ROLLER, CENTER ピックアップ ローラ バン (ナカ)	
12	FB1 - 6988 - 000		1	CAM, PICK - UP ROLLER, REAR ピックアップ ローラ カム (ウシロ)	
13	FB1 - 6999 - 000		2	ARM, SEPARATION ROLLER ブンリ ローラ アーム	
14	FC1 - 4939 - 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ カウンタ ジク	
15	FB1 - 7001 - 020		1	PLATE, RELEASE, SEPARATION ブンリ ローラ カイジョ リンク	
16	XA9 - 0626 - 000		2	SCREW,RS,M3X6 RS タイト ネジ	
17	FS5 - 9210 - 000		1	SCREW,STEPPED,M4 ダンビス	
18	XD9 - 0108 - 000		1	PIN,DOWEL ヘイコウ ピン	
19	FB1 - 7016 - 000		1	PLATE, ROLLER HOLDING, REAR ハンソウ ローラ ジク シダイ (ウシロ)	
20	FB2 - 0880 - 000		1	ARM, RELEASE リフタ カイジョ アーム	
21	FB1 - 7021 - 040		1	SHAFT, LIFTING カアツ ジク	
22	FB1 - 7032 - 000		1	PLATE, LIFTING カアツ バン	
23	FB1 - 7048 - 000		1	PLATE, ROLLER HOLDING, FRONT ハンソウ ローラ ジク シダイ (マエ)	
24	FB1 - 7049 - 000		1	JOINT ジョイント	
25	FB1 - 7051 - 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ クドウ ジク	
26	FB1 - 7059 - 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ ジク	
27	FB1 - 7060 - 020		1	ROLLER, SEPARATION ブンリ ローラ	
28	FB1 - 7061 - 000		1	ROLLER, FEEDER ハンソウ ローラ	
29	FB1 - 7062 - 000		1	SHAFT, PICK - UP ROLLER ピックアップ ローラ ジク	

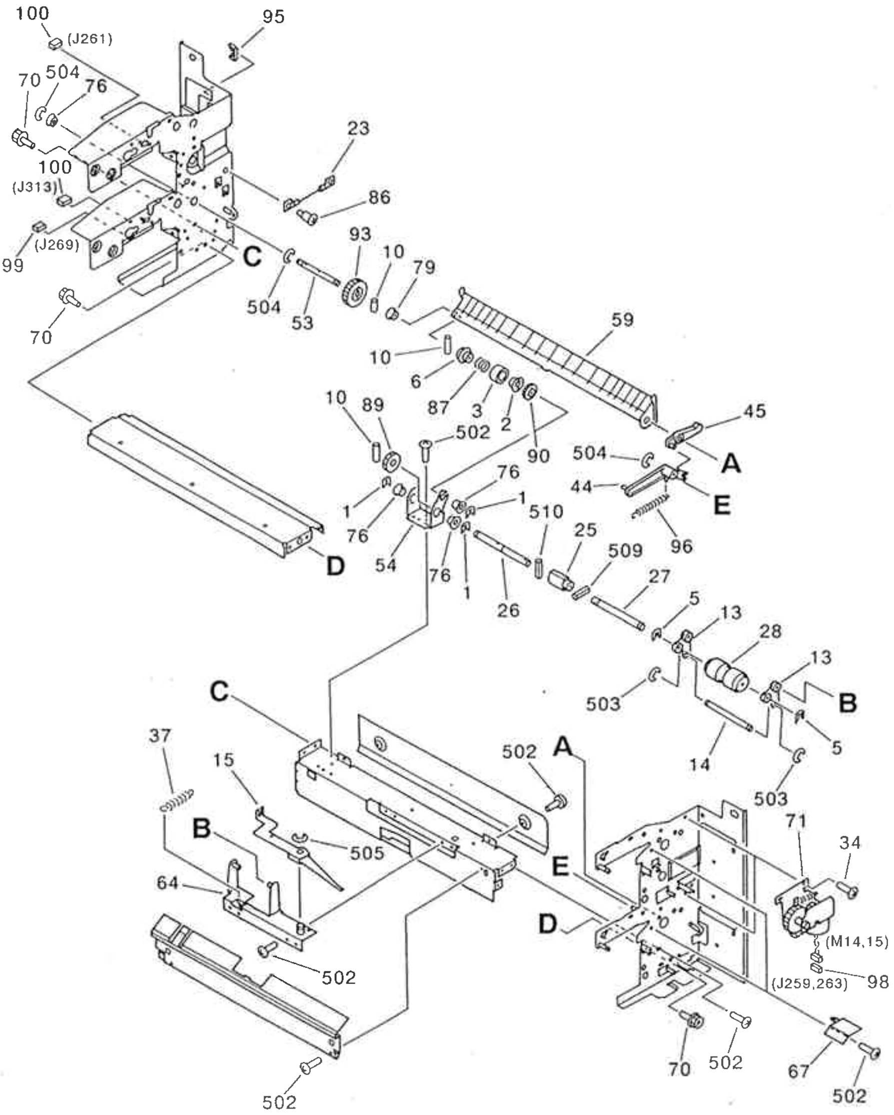
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
313A - 30	FB1 - 7064 - 000		1	PULLEY, ONE - WAY ワンウェイ プーリ	
31	FB1 - 7065 - 000		1	LEVER, SOLENOID ソレノイド レバー	
32	FB1 - 7066 - 000		1	PLATE, CONNECTING レンケツ バン	
33	XA9 - 0629 - 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
34	FB2 - 0845 - 000		1	BLOCK, STOPPER ツキアテ ブロック	
35	FB2 - 0804 - 000		1	CROSSMEMBER, LOWER シタ ステイ	
36	FB2 - 0806 - 000		1	COVER, SOLENOID ソレノイド カバー	
37	FB2 - 0815 - 020		1	ARM, PICK - UP ROLLER, FRONT ピック アップ ローラ アーム (マエ)	
38	FB2 - 0817 - 000		1	LINK, PICK - UP, 1 ピック アップ リンク (1)	
39	FB2 - 0818 - 000		1	LINK, PICK - UP, 2 ピック アップ リンク (2)	
40	FB2 - 8922 - 000		1	PLATE, PICK - UP ピック アップ バン	
41	FB2 - 8923 - 000		1	SHAFT, PICK - UP ピック アップ ジク	
42	FB2 - 0821 - 000		1	LEVER, PAPER SENSOR カミ ケンチ レバー	
43	FB2 - 0822 - 000		1	MOUNT, PAPER SENSOR カミ ケンチ センサ シバン	
44	FB2 - 0823 - 000		1	PLATE, RELEASE カイジョ バン	
45	FB2 - 0824 - 000		1	SHAFT, ROLLER FEED ハンソウ ローラ ジク	
46	FB2 - 0825 - 000		1	BUSHING ブッシング	
47	FB2 - 0826 - 000		1	SHAFT, GEAR ギア ジク	
48	FB2 - 0827 - 000		1	MOUNT, GEAR, SEPARATION ブンリ ギア シダイ	
49	FB2 - 0828 - 000		2	ROLLER, DRIVE, VERTICAL PATH タテパス クドウ ローラ	
50	FB2 - 0829 - 000		1	SPRING, TORSION ネジリ バネ	
51	FB2 - 0835 - 000		1	CROSSMEMBER, 2 ステイ (2)	
52	FB2 - 6285 - 000		4	SHIM ヒョウジュン ワッシャ	
53	FB2 - 8924 - 000		1	SUPPORT, SWITCH スイッチ オシバン	
54	FB2 - 0860 - 000		1	PLATE, CLUTCH STOP クラッチ ドメ	
55	FB2 - 0861 - 000		1	GUIDE, PICK - UP キュウシ ガイド	
56	FB2 - 0864 - 000		1	GUIDE, OPEN オープン ガイド	
57	FB2 - 0865 - 030		1	SUPPORT, PICK - UP ROLLER ピック アップ ローラ ササエ	
58	FB2 - 0866 - 000		1	ARM, PICK - UP ROLLER, REAR ピックアップ ローラ アーム (ウシロ)	
59	FB2 - 0867 - 000		1	GUIDE, SUPPORT, FRONT ホジョ ガイド (マエ)	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
313A - 60	FB2 - 0893 - 000		1	PLATE, GUIDE, UPPER タテパス ガイド (ウエ)	
61	FF5 - 2386 - 000		1	MOUNT, PULLEY プーリ ダイ	
62	XG9 - 0211 - 000		6	BALL BEARING, MF128ZZ1MC3D4M ボール ベアリング	
63	FC1 - 4882 - 000		1	FLANGE, PULLEY プーリ フランジ	
64	FF5 - 1111 - 000		1	MOUNT, SEPARATION ROLLER ブンリ ローラ ダイ	
65	FF5 - 1220 - 000		1	ROLLER, PICK - UP, FRONT ピックアップ ローラ (マエ)	
66	FF5 - 1221 - 000		1	ROLLER, PICK - UP, REAR ピックアップ ローラ (ウシロ)	
67	FF5 - 2093 - 000		1	PIN, GUIDE ガイド ピン	
68	FF5 - 2098 - 000		1	ARM, INPUT ニュウリョク アーム	
69	XG9 - 0172 - 000		2	BEARING, BALL ボール ベアリング	
70	XF9 - 0585 - 000		1	BELT, TIMING タイミング ベルト	
71	FB2 - 8926 - 000		1	GUIDE, SUPPORT, REAR ホジョ ガイド (ウシロ)	
72	FH6 - 1022 - 000		1	MOTOR, DC 24V モータ	M13 J241
73	FH7 - 5372 - 000		2	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL15,21 J240,246
74	FH7 - 5379 - 000		1	SOLENOID, DC24V ソレノイド	SL17 J238
75	FH7 - 5577 - 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL14 J239
76	FH7 - 7312 - 000		3	PHOTO - INTERRUPTER フォトインタラプタ	PS18,19,24 J236,237,251
77	FS1 - 1190 - 000		5	BUSHING ブッシング	
78	FS1 - 1512 - 000		2	BUSHING ブッシング	
79	FS1 - 1206 - 000		1	BUSHING ブッシング	
80	FS1 - 1346 - 000		1	BUSHING ブッシング	
81	WT2 - 5222 - 000		4	HOLD, CABLE ケーブル オサエ	
82	FS2 - 0544 - 000		1	GEAR, 24T 24T ギア	
83	WT2 - 5136 - 000		2	CLIP, CORD コード クリップ	
84	FS2 - 1008 - 000		1	BUSHING ブッシング	
85	FS2 - 3004 - 000		1	PULLEY, PICK - UP ROLLER キュウシ プーリ	
86	FB1 - 7046 - 000		2	SPACER, WEIGHT ウエイト カラー	
87	FS3 - 2008 - 000		1	SPRING, CLUTCH クラッチ バネ	
88	FF5 - 2100 - 000		1	ARM, TENSION テンション アーム	
89	FS5 - 0338 - 000		2	GEAR, 16T 16T ギア	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
313A – 90	FS5 – 0393 – 000		1	GEAR, 30T 30T ギア	
91	FS5 – 0394 – 000		1	GEAR, 30T 30T ギア	
92	FS5 – 0395 – 000		1	GEAR, 25T 25T ギア	
93	FS5 – 0721 – 000		1	GEAR, 31T 31T ギア	
94	FS5 – 2286 – 000		1	SPRING, TENSION ヒッパリ バネ	
95	WT2 – 5062 – 000		1	BUSHING, SQUARE スクエア ブッシュ	
96	FS5 – 2556 – 000		1	SPRING, TENSION ヒッパリ バネ	
97	FS5 – 2558 – 000		1	SPRING, TENSION ヒッパリ バネ	
98	FS5 – 6243 – 000		1	ROLLER コロ	
99	VS1 – 5057 – 002		5	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J209,238 – 241
100	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J227
101	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J231
102	WT2 – 0262 – 000		2	CLIP, CABLE ロッキング ワイヤ サドル	
103	WT2 – 0495 – 000		27	CLAMP, CABLE ケーブル クランプ	
104	WC4 – 5023 – 000		1	MICRO SWITCH マイクロ スイッチ	SW6 J243
105	WT2 – 5300 – 000		2	CLIP, CABLE エッジ サドル	
106	FG5 – 3199 – 000		1	CABLE, PICK – UP SENSOR キュウシ センサ ソクセン	J231,235,236
107	FS5 – 3248 – 000		1	PULLEY, 22T 22T プーリ	
108	XF9 – 0094 – 000		1	BELT, TIMING タイミング ベルト	
109	FS5 – 2287 – 000		1	SPRING, TENSION ヒッパリ バネ	
110	XD9 – 0103 – 000		6	PIN,DOWEL ヘイコウ ピン	
111	FF5 – 5708 – 000		2	LEVER, SENSING ケンチ レバー	
112	WT2 – 5212 – 000		1	CLAMP, CABLE, MINI ミニ クランプ	
113	FS2 – 3512 – 000		1	PULLEY プーリ	
114	FS5 – 0690 – 000		2	GEAR, 36T/PULLEY, 22T 36T ギア /22T プーリ	
115	FS5 – 2293 – 000		1	SPRING, TENSION ヒッパリ バネ	
116	FS4 – 0156 – 000		1	GEAR, 24T 24T ギア	
117	FS5 – 1220 – 000		1	BUSHING ブッシング	
118	FH7 – 7326 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS17 J235
501	XB1 – 2231 – 009		1	SCREW,MACH.,TRUSS HEAD,M2.3X10 バインド ネジ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
313A – 502	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
504	XD2 – 1100 – 242		2	RING,E E リング	
505	XD2 – 1100 – 502		AR	RING,E E リング	
506	XD2 – 1100 – 642		AR	RING,E E リング	
507	XD3 – 1200 – 082		1	PIN,SPRING スプリング ピン	
508	XD2 – 2100 – 602		1	RING,GRIP グリップ リング	
509	XD2 – 2100 – 802		2	RING,GRIP グリップ リング	
510	XD3 – 1200 – 102		1	PIN,SPRING スプリング ピン	
511	XD3 – 1200 – 122		1	PIN,SPRING スプリング ピン	
512	XB1 – 2300 – 409		3	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
513	XD3 – 1300 – 102		1	PIN,SPRING スプリング ピン	

FIGURE 314 LOWER PAPER PICK-UP ASSEMBLY(CLC920/950) (1/3)
下段給紙部（CLC920／950）（1/3）



100
(J261)
95
70
504
76
23
100
(J313)
86
99
(J269)
C
93
10
79
504
53
70
59
10
6
87
3
2
10
89
502
90
45
504
A
44
E
1
76
76
1
510
54
D
76
1
25
509
96
26
27
5
13
28
13
B
503
5
14
C
37
15
502
A
503
71
34
B
505
E
64
D
(M14,15)
502
(J259,263)
98
70
502
67
502
502

FIGURE 314

LOWER PAPER PICK-UP ASSEMBLY(CLC920/950) ($^{2}/_{3}$)
下段給紙部（CLC920／950）（$^{2}/_{3}$）

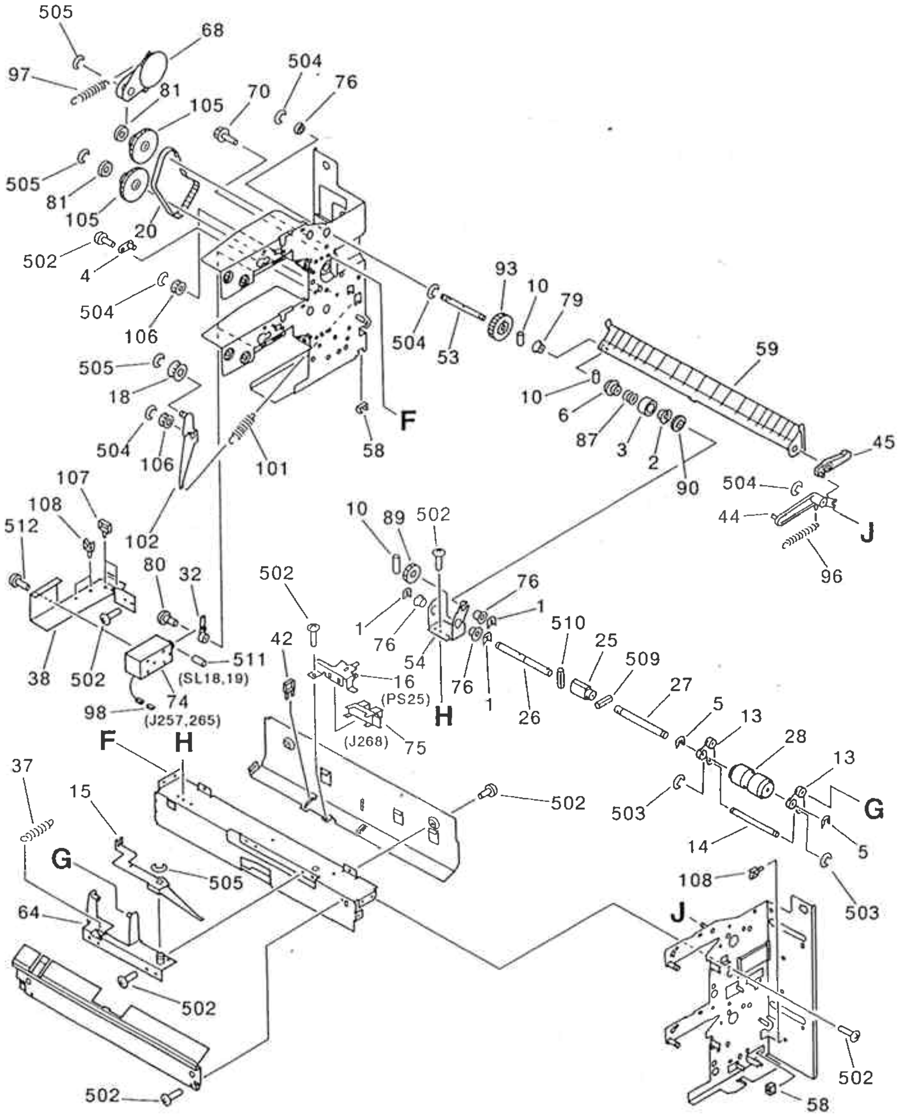
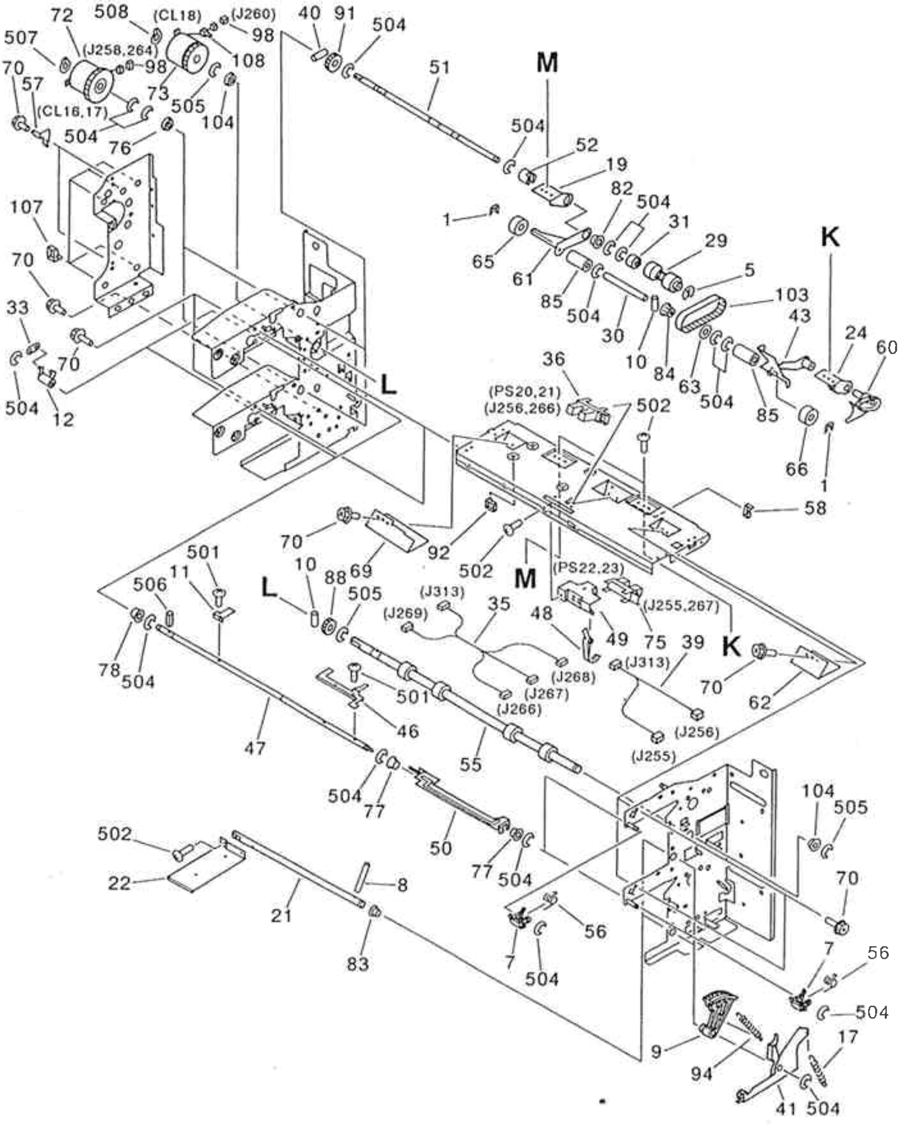

505
68
97
81
105
70
504
76
505
81
105
20
502
4
504
106
93
10
79
504
53
59
505
18
10
6
87
3
2
90
F
58
504
106
101
45
504
44
J
96
107
108
512
102
10
89
502
80
32
502
76
1
510
25
509
27
42
1
76
54
16
(PS25)
38
502
511
(SL18,19)
74
98
(J257,265)
H
76
1
26
(J268)
75
5
13
28
13
F
H
37
502
503
G
15
14
5
G
505
108
503
64
J
502
502
58
502

FIGURE 314

LOWER PAPER PICK-UP ASSEMBLY(CLC920/950) ($^3/_3$)
下段給紙部（CLC920／950）（$^3/_3$）



72
508
(CL18)
(J260)
98
507
(J258,264)
98
108
70
57
73
505
(CL16,17)
104
504
76
40
91
504
51
M
504
52
19
82
504
1
31
65
61
29
5
85
504
103
30
10
84
43
K
24
60
63
504
85
107
70
33
70
504
12
L
36
(PS20,21)
(J256,266)
502
66
1
58
70
92
502
69
M
(PS22,23)
501
11
506
10
88
505
(J313)
(J269)
35
48
(J255,267)
49
75
39
K
L
78
504
501
(J268)
(J313)
(J267)
70
62
(J266)
46
47
55
(J256)
(J255)
504
77
104
505
50
502
22
8
77
504
70
21
56
83
7
504
7
56
504
9
17
94
41
504

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
314 –	FG5 – 5644 – 040		1	LOWER PAPER PICK – UP ASSEMBLY ゲダン キュウシ ブ	CLC920/950
1	FA3 – 8727 – 000		10	RING, RETAINING トメ ワ	
2	FA3 – 8729 – 000		2	DRUM, CLUTCH DRIVING クラッチ ドラム	
3	FA3 – 8730 – 000		2	CASE, CLUTCH ACTION クラッチ ケース	
4	FA4 – 1149 – 000		1	PIN, PLATE ゼツエン ピン	
5	FA5 – 2864 – 020		6	RING, RETAINING トメワ	
6	FA5 – 2865 – 000		2	DRUM, CLUTCH DRIVE ニュウリョク ドラム	
7	FA5 – 2872 – 000		2	ARM, RELEASE, ROLLER, FRONT キュウシ ローラ カイジョ アーム (マエ)	
8	FA5 – 2924 – 000		2	PIN,DOWEL ヘイコウ ピン	
9	FB1 – 6980 – 020		2	GEAR, 16T 16T ギア	
10	XD9 – 0103 – 000		9	PIN,DOWEL ヘイコウ ピン	
11	FB1 – 6985 – 000		2	PLATE, PICK – UP ROLLER, CENTER ピックアップ ローラ バン (ナカ)	
12	FB1 – 6988 – 000		2	CAM, PICK – UP ROLLER, REAR ピックアップ ローラ カム (ウシロ)	
13	FB1 – 6999 – 000		4	ARM, SEPARATION ROLLER ブンリ ローラ アーム	
14	FC1 – 4939 – 000		2	SHAFT, SEPARATION ROLLER ブンリ ローラ カウンタ ジク	
15	FB1 – 7001 – 020		2	PLATE, RELEASE, SEPARATION ブンリ ローラ カイジョ リンク	
16	FF5 – 5708 – 000		1	LEVER, SENSING ケンチ レバー	
17	FS5 – 2287 – 000		2	SPRING, TENSION ヒッパリ バネ	
18	FS5 – 6157 – 000		1	ROLLER コロ	
19	FB1 – 7016 – 000		2	PLATE, ROLLER HOLDING, REAR ハンソウ ローラ ジク シダイ (ウシロ)	
20	XF9 – 0120 – 000		1	BELT, TIMING タイミング ベルト	
21	FB1 – 7021 – 040		2	SHAFT, LIFTING カアツ ジク	
22	FB1 – 7032 – 000		2	PLATE, LIFTING カアツ バン	
23	FB1 – 7041 – 000		2	WIRE, DOOR SUPPORT ミギ トビラ ササエ ワイヤ	
24	FB1 – 7048 – 000		2	PLATE, ROLLER HOLDING, FRONT ハンソウ ローラ ジク シダイ (マエ)	
25	FB1 – 7049 – 000		2	JOINT ジョイント	
26	FB1 – 7051 – 000		2	SHAFT, SEPARATION ROLLER ブンリ ローラ クドウ ジク	
27	FB1 – 7059 – 000		2	SHAFT, SEPARATION ROLLER ブンリ ローラ ジク	
28	FB1 – 7060 – 020		2	ROLLER, SEPARATION ブンリ ローラ	
29	FB1 – 7061 – 000		2	ROLLER, FEEDER ハンソウ ローラ	

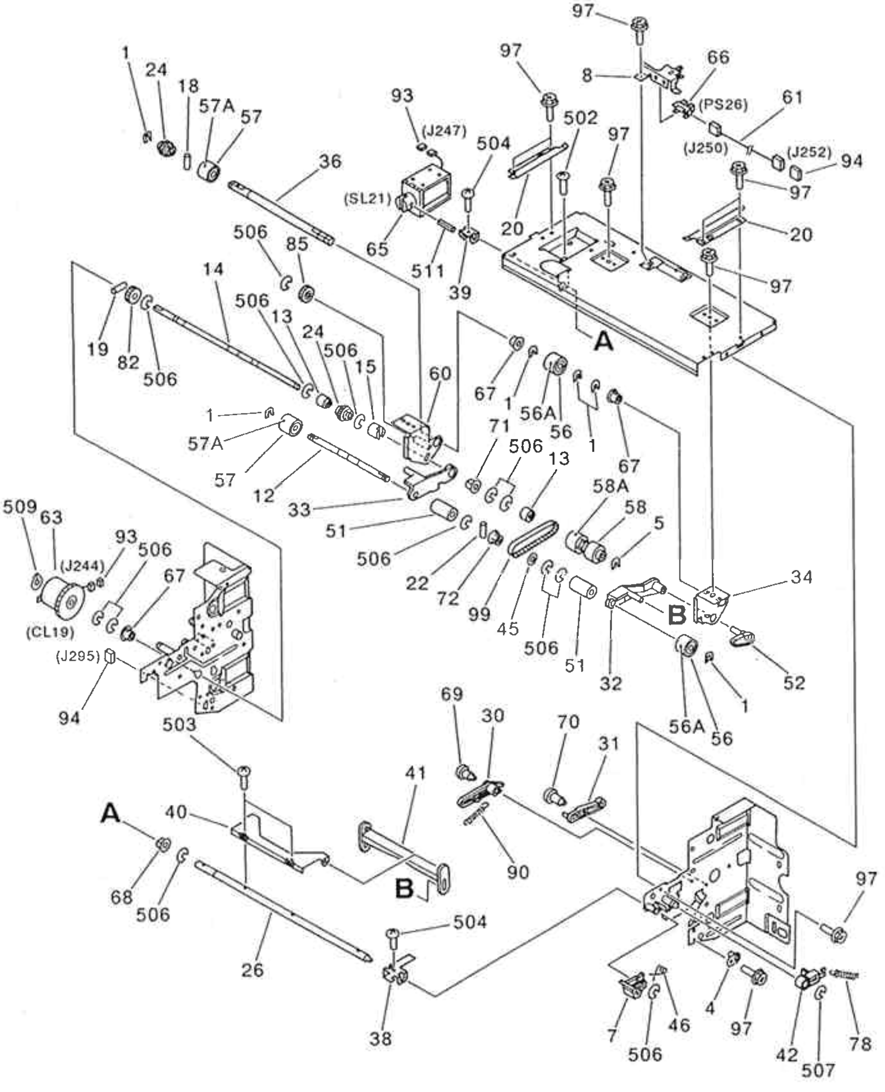
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
314 – 30	FB1 – 7062 – 000		2	SHAFT, PICK – UP ROLLER ピックアップ ローラ ジク	
31	FB1 – 7064 – 000		2	PULLEY, ONE – WAY ワンウェイ プーリ	
32	FB1 – 7065 – 000		2	LEVER, SOLENOID ソレノイド レバー	
33	FB1 – 7066 – 000		2	PLATE, CONNECTING レンケツ バン	
34	XA9 – 0626 – 000		4	SCREW,RS,M3X6 RS タイト ネジ	
35	FG5 – 3213 – 000		1	CABLE, LIFTER, LOWER ゲダン リフタ ソクセン	J266 – 269,313
36	FH7 – 7326 – 000		2	PHOTO – INTERRUPTER フォトインタラプタ	PS20,21 J256,266
37	FS5 – 2293 – 000		2	SPRING, TENSION ヒッパリ バネ	
38	FB2 – 0806 – 000		2	COVER, SOLENOID ソレノイド カバー	
39	FG5 – 3158 – 000		1	CABLE, PICK – UP SENSOR キュウシ センサ ソクセン	J255,256,313
40	XD9 – 0108 – 000		2	PIN,DOWEL ヘイコウ ピン	
41	FB2 – 0880 – 000		2	ARM, RELEASE リフタ カイジョ アーム	
42	WT2 – 5136 – 000		1	CLIP, CORD コード クリップ	
43	FB2 – 0815 – 020		2	ARM, PICK – UP ROLLER, FRONT ピック アップ ローラ アーム（マエ）	
44	FB2 – 0817 – 000		2	LINK, PICK – UP, 1 ピック アップ リンク (1)	
45	FB2 – 0818 – 000		2	LINK, PICK – UP, 2 ピック アップ リンク (2)	
46	FB2 – 8922 – 000		2	PLATE, PICK – UP ピック アップ バン	
47	FB2 – 8923 – 000		2	SHAFT, PICK – UP ピック アップ ジク	
48	FB2 – 0821 – 000		2	LEVER, PAPER SENSOR カミ ケンチ レバー	
49	FB2 – 0822 – 000		2	MOUNT, PAPER SENSOR カミ ケンチ センサ シバン	
50	FB2 – 0823 – 000		2	PLATE, RELEASE カイジョ バン	
51	FB2 – 0824 – 000		2	SHAFT, ROLLER FEED ハンソウ ローラ ジク	
52	FB2 – 0825 – 000		2	BUSHING ブッシング	
53	FB2 – 0826 – 000		2	SHAFT, GEAR ギア ジク	
54	FB2 – 0827 – 000		2	MOUNT, GEAR, SEPARATION ブンリ ギア シダイ	
55	FB2 – 0828 – 000		1	ROLLER, DRIVE, VERTICAL PATH タテパス クドウ ローラ	
56	FB2 – 0829 – 000		2	SPRING, TORSION ネジリ バネ	
57	FB2 – 0860 – 000		2	PLATE, CLUTCH STOP クラッチ ドメ	
58	WT2 – 5300 – 000		6	CLIP, CABLE エッジ サドル	
59	FB2 – 0864 – 000		2	GUIDE, OPEN オープン ガイド	

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
314 –	60	FB2 – 0865 – 030		2	SUPPORT, PICK – UP ROLLER ピック アップ ローラ ササエ	
	61	FB2 – 0866 – 000		2	ARM, PICK – UP ROLLER, REAR ピックアップ ローラ アーム (ウシロ)	
	62	FB2 – 0867 – 000		2	GUIDE, SUPPORT, FRONT ホジョ ガイド (マエ)	
	63	FC1 – 4882 – 000		2	FLANGE, PULLEY プーリ フランジ	
	64	FF5 – 1111 – 000		2	MOUNT, SEPARATION ROLLER ブンリ ローラ ダイ	
	65	FF5 – 1220 – 000		2	ROLLER, PICK – UP, FRONT ピックアップ ローラ (マエ)	
	66	FF5 – 1221 – 000		2	ROLLER, PICK – UP, REAR ピックアップ ローラ (ウシロ)	
	67	FF5 – 2093 – 000		2	PIN, GUIDE ガイド ピン	
	68	FF5 – 2094 – 000		1	ARM, INPUT, LOWER ニュウリョク アーム (シタ)	
	69	FB2 – 8926 – 000		2	GUIDE, SUPPORT, REAR ホジョ ガイド (ウシロ)	
	70	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
	71	FH6 – 1022 – 000		2	MOTOR, DC 24V モータ	M14,15 J259,263
	72	FH7 – 5371 – 000		2	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL16,17 J258,264
	73	FH7 – 5372 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL18 J260
	74	FH7 – 5379 – 000		2	SOLENOID, DC24V ソレノイド	SL18,19 J257,265
	75	FH7 – 7312 – 000		3	PHOTO – INTERRUPTER フォトインタラプタ	PS22,23,25 J255,267,268
	76	FS1 – 1190 – 000		10	BUSHING ブッシング	
	77	FS1 – 1512 – 000		4	BUSHING ブッシング	
	78	FS1 – 1206 – 000		2	BUSHING ブッシング	
	79	FS1 – 1346 – 000		2	BUSHING ブッシング	
	80	FS5 – 9210 – 000		2	SCREW,STEPPED,M4 ダンビス	
	81	XG9 – 0250 – 000		2	BEARING, BALL ボール ベアリング	
	82	FS5 – 1220 – 000		2	BUSHING ブッシング	
	83	FS2 – 1008 – 000		2	BUSHING ブッシング	
	84	FS2 – 3004 – 000		2	PULLEY, PICK – UP ROLLER キュウシ プーリ	
	85	FB1 – 7046 – 000		4	SPACER, WEIGHT ウエイト カラー	
	86	FS5 – 9221 – 000		2	SCREW, POSITIONING イチキメ ビス	
	87	FS3 – 2008 – 000		2	SPRING, CLUTCH クラッチ バネ	
	88	FS5 – 0338 – 000		1	GEAR, 16T 16T ギア	
	89	FS5 – 0393 – 000		2	GEAR, 30T 30T ギア	

FIGURE & KEY NO	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
314 – 90	FS5 – 0394 – 000		2	GEAR, 30T 30T ギア	
91	FS5 – 0395 – 000		2	GEAR, 25T 25T ギア	
92	WT2 – 5222 – 000		10	HOLD, CABLE ケーブル オサエ	
93	FS5 – 0721 – 000		2	GEAR, 31T 31T ギア	
94	FS5 – 2286 – 000		2	SPRING, TENSION ヒッパリ バネ	
95	WT2 – 0204 – 000		1	CLIP, CABLE エッジ サドル	
96	FS5 – 2556 – 000		2	SPRING, TENSION ヒッパリ バネ	
97	FS5 – 2623 – 000		1	SPRING, TENSION ヒッパリ バネ	
98	VS1 – 5057 – 002		7	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J257 – 260,263 – 265
99	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J269
100	VS1 – 5057 – 006		2	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J261,313
101	FS5 – 2621 – 000		1	SPRING, TENSION ヒッパリ バネ	
102	FF5 – 2328 – 000		1	ARM, TENSION テンション アーム	
103	XF9 – 0094 – 000		2	BELT, TIMING タイミング ベルト	
104	XG9 – 0211 – 000		2	BALL BEARING, MF128ZZ1MC3D4M ボール ベアリング	
105	FS5 – 3261 – 000		2	GEAR, 42T/PULLEY, 42T 42T ギア /42T プーリ	
106	FS5 – 3262 – 000		2	PULLEY, 19T 19T プーリ	
107	WT2 – 0262 – 000		5	CLIP, CABLE ロッキング ワイヤ サドル	
108	WT2 – 0495 – 000		AR	CLAMP, CABLE ケーブル クランプ	
501	XB1 – 2300 – 609		4	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XD2 – 1100 – 242		4	RING,E E リング	
504	XD2 – 1100 – 502		AR	RING,E E リング	
505	XD2 – 1100 – 642		AR	RING,E E リング	
506	XD3 – 1200 – 082		2	PIN,SPRING スプリング ピン	
507	XD2 – 2100 – 602		2	RING,GRIP グリップ リング	
508	XD2 – 2100 – 802		1	RING,GRIP グリップ リング	
509	XD3 – 1200 – 102		2	PIN,SPRING スプリング ピン	
510	XD3 – 1200 – 122		2	PIN,SPRING スプリング ピン	
511	XD3 – 1300 – 102		2	PIN,SPRING スプリング ピン	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
314 - 512	XB1 - 2300 - 409		6	SCREW,MACH.,TRUSS HEAD,M3X4 バインドネジ	

FIGURE 315 PAPER PICK-UP FEEDER ASSEMBLY(CLC950) (1/3)
再給紙部（CLC950）（1/3）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1
24
18
57A
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97
93
(J247)
8
66
(PS26)
61
502
36
504
97
(J250)
(J252)
94
(SL21)
97
20
506
65
511
20
85
39
97
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506
13
24
506
A
19
82
506
15
60
67
1
56A
56
1
67
1
57A
57
12
71
506
13
58A
58
33
5
509
63
51
93
506
(J244)
506
22
72
99
45
34
67
(CL19)
B
506
51
32
52
(J295)
94
1
56A
56
503
69
30
70
31
41
A
40
90
B
68
506
97
504
26
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506
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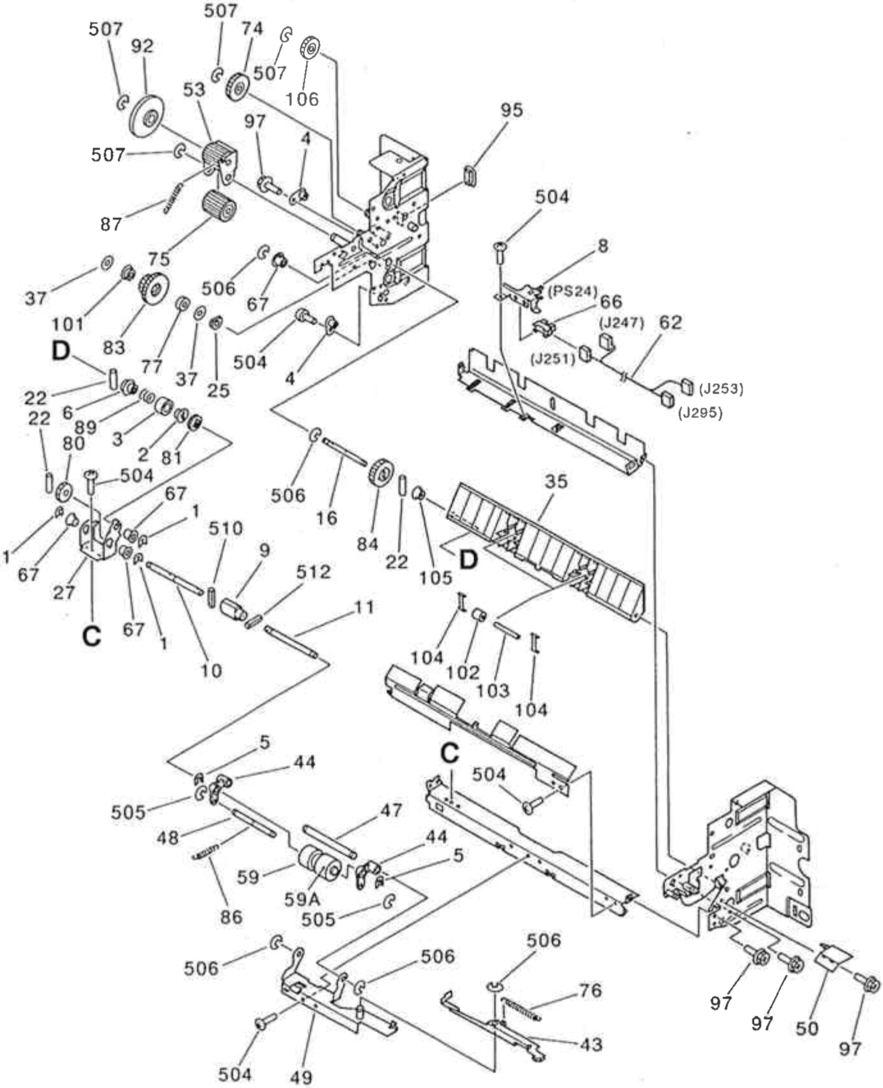
78

FIGURE 315 PAPER PICK-UP FEEDER ASSEMBLY(CLC950) ($^{2}/_{3}$)
再給紙部（CLC950）（$^{2}/_{3}$）



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106
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87
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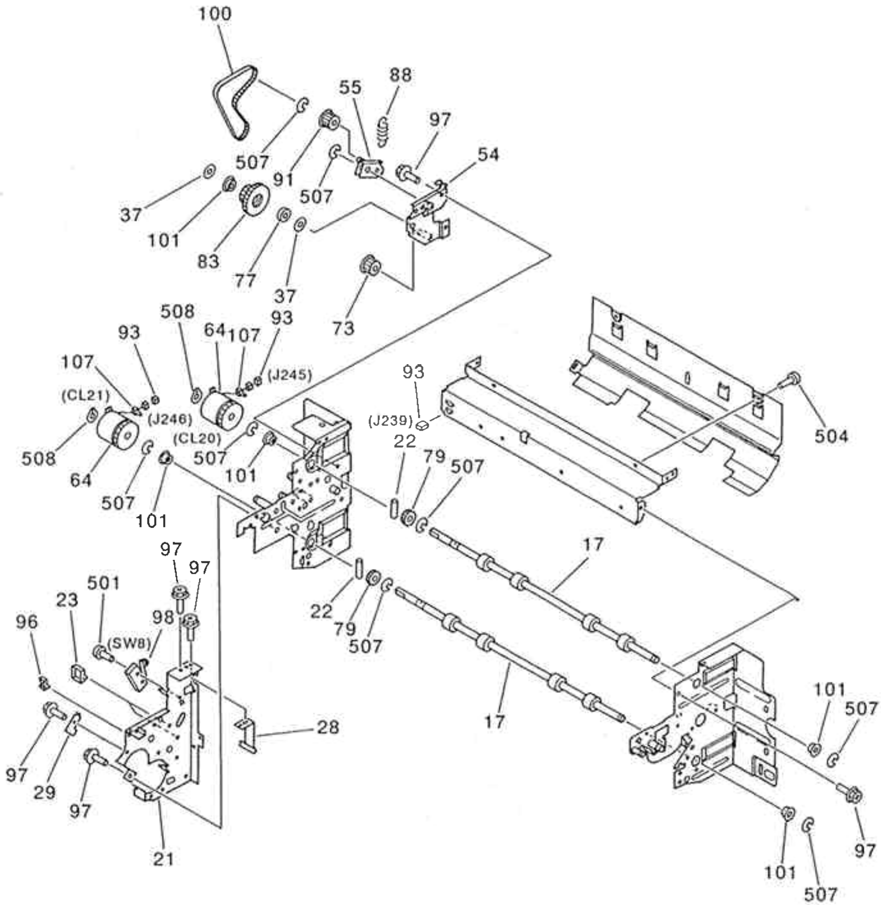
504
8
37
101
506
67
(PS24)
66
(J247)
62
83
504
77
37
25
4
(J251)
(J253)
(J295)
D
22
6
89
22
3
2
81
80
504
67
1
506
16
84
22
105
35
D
510
9
512
1
67
27
C
67
1
11
10
104
102
103
104
5
44
C
504
505
48
47
44
5
59
59A
505
86
506
506
506
76
43
504
49
97
97
50
97

FIGURE 315

PAPER PICK-UP FEEDER ASSEMBLY(CLC950) (${}^{3}/_{3}$)
再給紙部（CLC950）（${}^{3}/_{3}$）


100
88
55
97
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37
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83
77
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73
508
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64
107
93
107
(J245)
(CL21)
(J246)
(CL20)
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64
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101
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101
93
(J239)
22
79
507
504
17
97
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501
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(SW8)
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17
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101
507

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
315 –	FG5 – 2650 – 040		1	PAPER PICK – UP FEEDER ASSEMBLY サイ キュウシ ブ	**CLC950**
1	FA3 – 8727 – 000		9	RING, RETAINING トメ ワ	
2	FA3 – 8729 – 000		1	DRUM, CLUTCH DRIVING クラッチ ドラム	
3	FB3 – 1632 – 000		1	COUPLING クラッチ ケース	
4	FA4 – 1149 – 000		3	PIN, PLATE ゼツエン ピン	
5	FA5 – 2864 – 020		3	RING, RETAINING トメワ	
6	FA5 – 2865 – 000		1	DRUM, CLUTCH DRIVE ニュウリョク ドラム	
7	FA5 – 2872 – 000		1	ARM, RELEASE, ROLLER, FRONT キュウシ ローラ カイジョ アーム (マエ)	
8	FF5 – 5708 – 000		2	LEVER, SENSING ケンチ レバー	
9	FB1 – 7049 – 000		1	JOINT ジョイント	
10	FB1 – 7051 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ クドウ ジク	
11	FB1 – 7059 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ ジク	
12	FB1 – 7062 – 000		1	SHAFT, PICK – UP ROLLER ピックアップ ローラ ジク	
13	FB1 – 7064 – 000		2	PULLEY, ONE – WAY ワンウェイ プーリ	
14	FB2 – 0824 – 000		1	SHAFT, ROLLER FEED ハンソウ ローラ ジク	
15	FB2 – 0825 – 000		1	BUSHING ブッシング	
16	FB2 – 0826 – 000		1	SHAFT, GEAR ギア ジク	
17	FB2 – 0828 – 000		2	ROLLER, DRIVE, VERTICAL PATH タテパス クドウ ローラ	
18	XD9 – 0111 – 000		1	PIN,DOWEL ヘイコウ ピン	
19	XD9 – 0108 – 000		1	PIN,DOWEL ヘイコウ ピン	
20	FB2 – 0836 – 000		2	RAIL, 1 レール (1)	
21	FB2 – 0837 – 020		1	PLATE, DRIVE クドウ シバン	
22	XD9 – 0103 – 000		6	PIN,DOWEL ヘイコウ ピン	
23	WT2 – 0262 – 000		2	CLIP, CABLE ロッキング ワイヤ サドル	
24	FS5 – 0985 – 000		2	GEAR, 16T 16T ギア	
25	FB2 – 0845 – 000		1	BLOCK, STOPPER ツキアテ ブロック	
26	FB2 – 0850 – 000		1	SHAFT, PICK – UP ピックアップ ジク	
27	FB2 – 0851 – 000		1	MOUNT, SEPARATION GEAR ブンリ ギア シダイ	
28	FB2 – 8924 – 000		1	SUPPORT, SWITCH スイッチ オシバン	
29	FB2 – 0860 – 000		1	PLATE, CLUTCH STOP クラッチ ドメ	

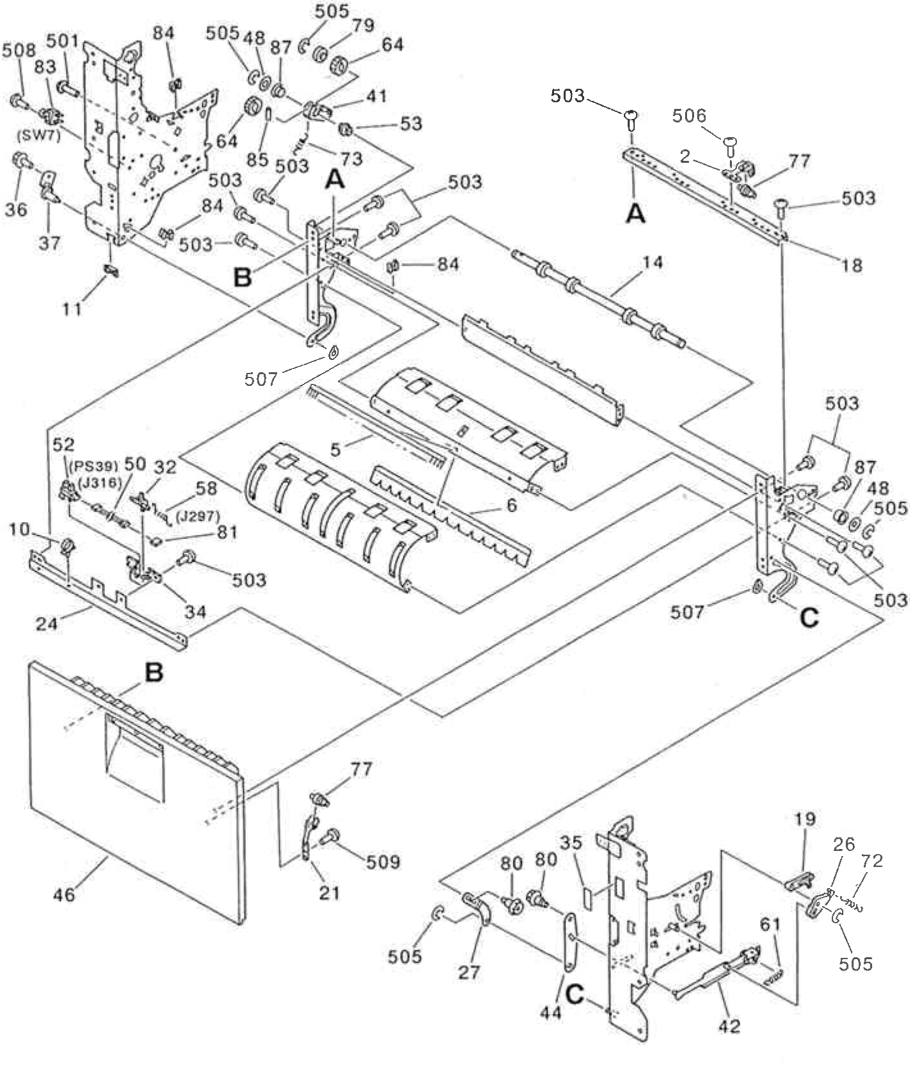
FIGURE & KEY NO.		PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
315 –	30	FB2 – 0862 – 000		1	LINK, PICK – UP, 1 ピックアップ リンク (1)	
	31	FB2 – 0863 – 000		1	LINK, PICK – UP, 2 ピックアップ リンク (2)	
	32	FB2 – 0871 – 000		1	ARM, PICK – UP ROLLER, FRONT ピックアップ ローラ アーム (マエ)	
	33	FB2 – 0872 – 000		1	ARM, PICK – UP ROLLER, REAR ピックアップ ローラ アーム (ウシロ)	
	34	FB2 – 0874 – 000		1	MOUNT, FEED ROLLER, FRONT ハンソウ ローラ シダイ (マエ)	
	35	FB2 – 0876 – 000		1	GUIDE, OPEN オープン ガイド	
	36	FB2 – 0877 – 000		1	SHAFT, ROLLER ローラ ジク	
	37	FB2 – 6285 – 000		4	SHIM ヒョウジュン ワッシャ	
	38	FC1 – 4867 – 000		1	PLATE, PICK – UP ピックアップ バン	
	39	FC1 – 4868 – 000		1	LEVER, SOLENOID ソレノイド レバー	
	40	FC1 – 4869 – 000		1	PLATE, LIFT リフト プレート	
	41	FC1 – 4870 – 000		1	LINK, PLATE プレート リンク	
	42	FC1 – 4873 – 000		1	CAM, INTERLOCK, UPPER インターロック カム (ウエ)	
	43	FC1 – 4874 – 000		1	ARM, RELEASE カイジョ アーム	
	44	FC1 – 4880 – 000		2	ARM, ROLLER ローラ アーム	
	45	FC1 – 4882 – 000		1	FLANGE, PULLEY プーリ フランジ	
	46	FC1 – 4883 – 000		1	SPRING, TORSION ネジリ バネ	
	47	FC1 – 4886 – 000		1	SHAFT, DRIVE クドウ ジク	
	48	FC1 – 4939 – 000		1	SHAFT, SEPARATION ROLLER ブンリ ローラ カウンタ ジク	
	49	FF2 – 7202 – 000		1	MOUNT, DRIVE クドウ シダイ	
	50	FF5 – 2093 – 000		1	PIN, GUIDE ガイド ピン	
	51	FB1 – 7046 – 000		2	SPACER, WEIGHT ウエイト カラー	
	52	FB1 – 6992 – 000		1	PIVOT, PICK – UP ROLLER ピックアップ ローラ ササエ ダボ	
	53	FF5 – 2098 – 000		1	ARM, INPUT ニュウリョク アーム	
	54	FF5 – 2099 – 000		1	MOUNT, PULLEY, 1 プーリ ダイ (1)	
	55	FF5 – 2100 – 000		1	ARM, TENSION テンション アーム	
	56	FF5 – 2101 – 000		2	ROLLER, PICK – UP, FRONT ピックアップ ローラ (マエ)	
	56A	FB2 – 0846 – 000		1	RING, ROLLER ローラ ゴム	
	57	FF5 – 2102 – 000		2	ROLLER, PICK – UP, REAR ピックアップ ローラ (ウシロ)	
	57A	FB2 – 0846 – 000		1	RING, ROLLER ローラ ゴム	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
315 – 58	FF5 – 2103 – 000		1	ROLLER, FEEDER ハンソウ ローラ	
58A	FB2 – 0847 – 000		2	RING, ROLLER ローラ ゴム	
59	FF5 – 2104 – 000		1	ROLLER, SEPARATION ブンリ ローラ	
59A	FB2 – 0848 – 000		2	RING, ROLLER ローラ ゴム	
60	FF5 – 2266 – 000		1	MOUNT, ROLLER, REAR ローラ シダイ (ウシロ)	
61	FG5 – 3209 – 000		1	CABLE, VERTICAL PATH, 1 キュウシ タテパス ソクセン (1)	J250,252
62	FG5 – 3210 – 000		1	CABLE, VERTICAL PATH, 2 キュウシ タテパス ソクセン (2)	J247,251,253,295
63	FH7 – 5371 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL19 J244
64	FH7 – 5372 – 000		2	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL20,21 J245,246
65	FH7 – 5421 – 000		1	SOLENOID, DC24V ソレノイド	SL21 J247
66	FH7 – 7312 – 000		2	PHOTO – INTERRUPTER フォトインタラプタ	PS24,26 J251,250
67	FS1 – 1190 – 000		7	BUSHING ブッシング	
68	FS1 – 1512 – 000		1	BUSHING ブッシング	
69	FS5 – 9210 – 000		1	SCREW,STEPPED,M4 ダンビス	
70	FS5 – 9222 – 000		1	SCREW,STEPPED,M4 ダンビス	
71	FS5 – 1220 – 000		1	BUSHING ブッシング	
72	FS2 – 3004 – 000		1	PULLEY, PICK – UP ROLLER キュウシ プーリ	
73	FS2 – 3512 – 000		1	PULLEY プーリ	
74	FS6 – 0001 – 000		1	GEAR, 30T 30T ギア	
75	FS4 – 0156 – 000		1	GEAR, 24T 24T ギア	
76	FS4 – 2124 – 000		1	SPRING, TENSION ヒッパリ バネ	
77	XG9 – 0172 – 000		2	BEARING, BALL ボール ベアリング	
78	FS4 – 2145 – 000		1	SPRING, TENSION ヒッパリ バネ	
79	FS5 – 0338 – 000		2	GEAR, 16T 16T ギア	
80	FS5 – 0393 – 000		1	GEAR, 30T 30T ギア	
81	FS5 – 0394 – 000		1	GEAR, 30T 30T ギア	
82	FS5 – 0395 – 000		1	GEAR, 25T 25T ギア	
83	FS5 – 0690 – 000		2	GEAR, 36T/PULLEY, 22T 36T ギア /22T プーリ	
84	FS5 – 0721 – 000		1	GEAR, 31T 31T ギア	
85	FS5 – 0742 – 000		1	GEAR, 20T 20T ギア	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
315 – 86	FS5 – 2557 – 000		1	SPRING, TENSION ヒッパリ バネ	
87	FS5 – 2558 – 000		1	SPRING, TENSION ヒッパリ バネ	
88	FS5 – 2559 – 000		1	SPRING, TENSION ヒッパリ バネ	
89	FS5 – 2595 – 000		1	SPRING, TORSION ネジリ バネ	
90	FS5 – 2607 – 000		1	SPRING, TENSION ヒッパリ バネ	
91	FS5 – 3248 – 000		1	PULLEY, 22T 22T プーリ	
92	FS5 – 6243 – 000		1	ROLLER コロ	
93	VS1 – 5057 – 002		5	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J239,244 – 247
94	VS1 – 5057 – 003		2	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J252,295
95	WT2 – 5062 – 000		1	BUSHING, SQUARE スクエア ブッシュ	
96	WT2 – 5136 – 000		2	CLIP, CORD コード クリップ	
97	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
98	WC4 – 5023 – 000		1	MICRO SWITCH マイクロ スイッチ	SW8
99	XF9 – 0400 – 000		1	BELT, TIMING タイミング ベルト	
100	XF9 – 0466 – 000		1	BELT, TIMING タイミング ベルト	
101	XG9 – 0211 – 000		6	BALL BEARING, MF128ZZ1MC3D4M ボール ベアリング	
102	FA5 – 4628 – 000		2	SPACER ROLLER ハンテン コロ	
103	FA5 – 4629 – 000		2	ROD, ROLLER コロ ジク	
104	FA5 – 4630 – 000		4	SPRING, LEAF イタ バネ	
105	FS1 – 1346 – 000		1	BUSHING ブッシング	
106	FS2 – 0544 – 000		1	GEAR, 24T 24T ギア	
107	WT2 – 0495 – 000		12	CLAMP, CABLE ケーブル クランプ	
501	XB1 – 2231 – 009		1	SCREW,MACH.,TRUSS HEAD,M2.3X10 バインド ネジ	
502	XB1 – 2300 – 409		2	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
503	XB1 – 2300 – 609		4	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
504	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
505	XD2 – 1100 – 242		2	RING,E E リング	
506	XD2 – 1100 – 502		AR	RING,E E リング	
507	XD2 – 1100 – 642		AR	RING,E E リング	
508	XD2 – 2100 – 802		2	RING,GRIP グリップ リング	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
315 – 509	XD2 – 2100 – 602		1	RING,GRIP グリップ リング	
510	XD3 – 1200 – 122		1	PIN,SPRING スプリング ピン	
511	XD3 – 1300 – 252		1	PIN,SPRING スプリング ピン	
512	XD3 – 1200 – 102		1	PIN,SPRING スプリング ピン	

FIGURE 316 REVERSE ASSEMBLY (CLC950) (1/3)
反転部 (CLC950) (1/3)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79
505
48
87
64
508
501
84
83
(SW7)
41
53
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37
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11
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506
2
77
A
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18
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503
87
48
505
503
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C
52
(PS39)
(J316)
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(J297)
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503
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24
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19
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44
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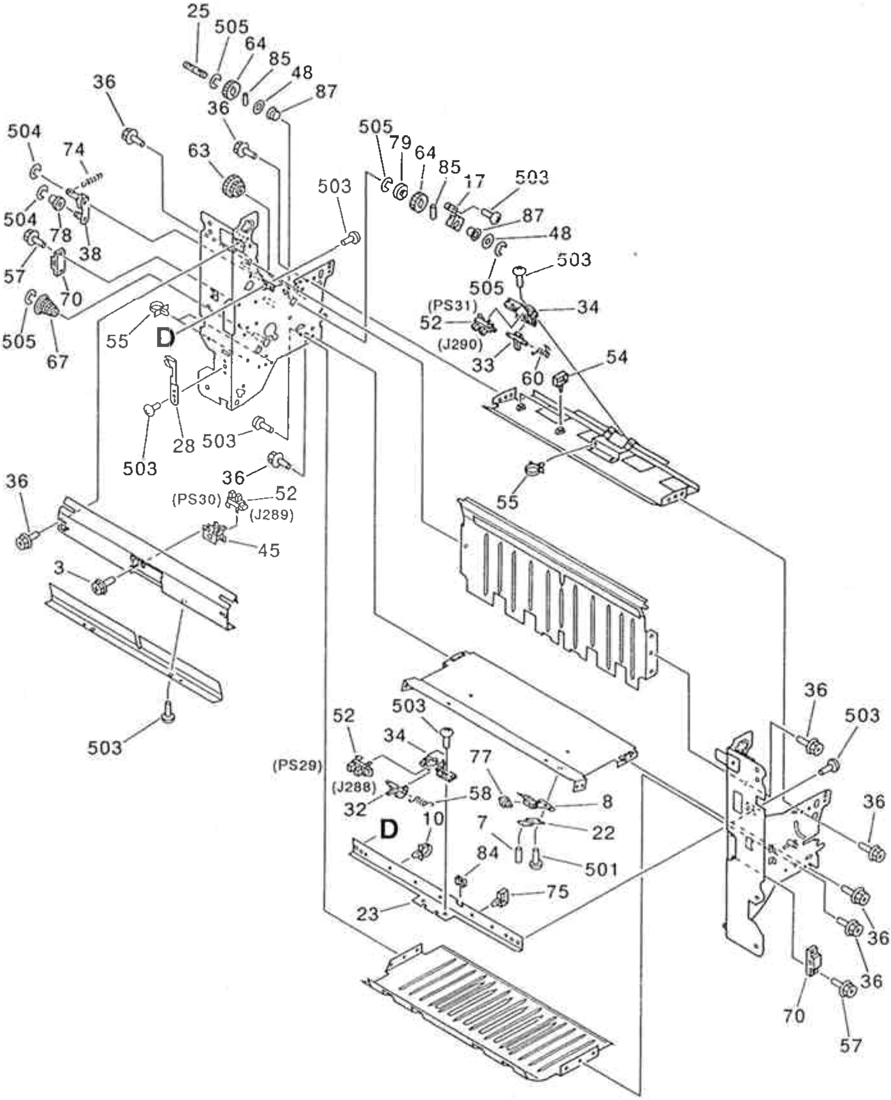
505

FIGURE 316 REVERSE ASSEMBLY (CLC950) ($^{2}/_{3}$)
反転部（CLC950）（$^{2}/_{3}$）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(PS31)
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(J290)
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(PS30)
52
(J289)
36
45
3
503
52
503
34
(PS29)
(J288)
32
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D
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77
8
22
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501
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23
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503
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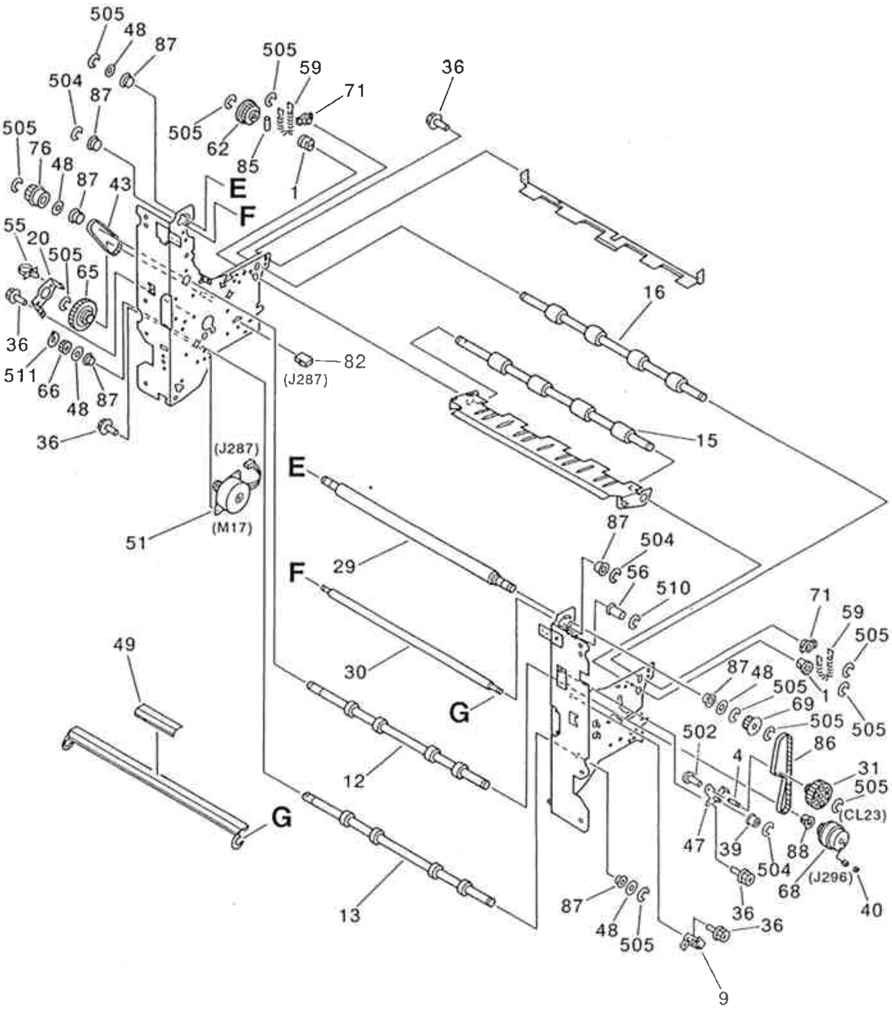
70
57

FIGURE 316 REVERSE ASSEMBLY (CLC950) ($^{3}/_{3}$)

反転部（CLC950）（$^{3}/_{3}$）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59
71
505
62
85
1
E
F
36
16
82
(J287)
15
(J287)
51
(M17)
E
29
F
30
G
12
13
49
G
87
504
56
510
71
59
505
87
48
505
1
69
505
505
502
86
4
31
505
(CL23)
47
39
504
88
68
(J296)
40
36
36
87
48
505
9

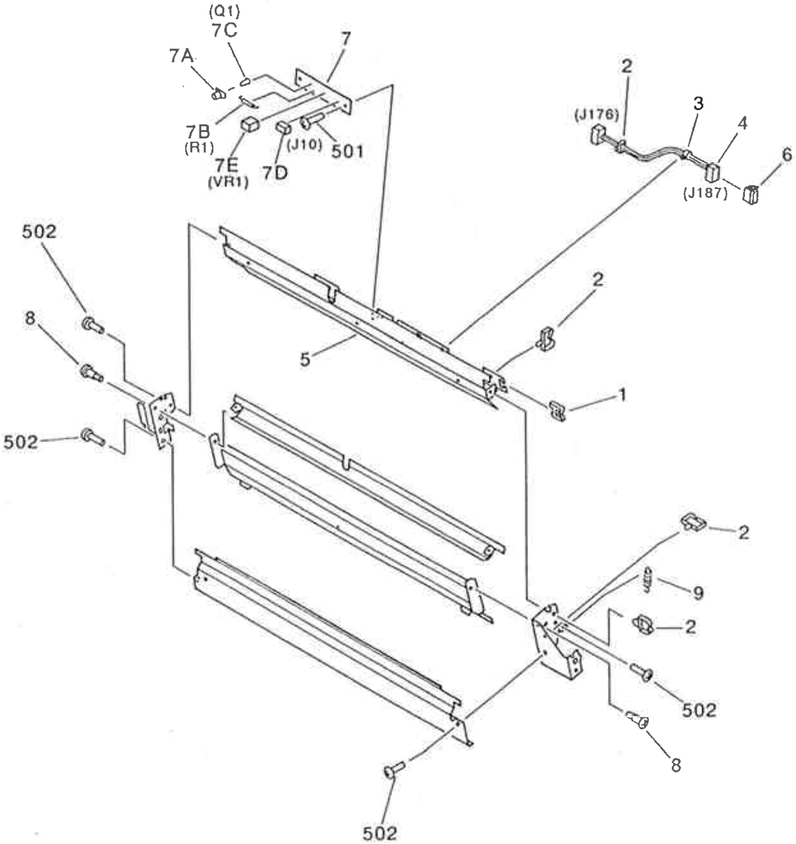
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
316 –	FG5 – 2705 – 110		1	REVERSE ASSEMBLY ハンテン ブ	**CLC950**
1	FA1 – 0056 – 000		2	BUSHING ブッシング	
2	FB1 – 8429 – 000		4	HOLDER, ROLLER, 2 コロ ホルダ (2)	
3	XA9 – 0685 – 000		2	SCREW,RS,M4X6 RS タイト ネジ	
4	FS5 – 5537 – 000		1	PIN ノブ ジク	
5	FB3 – 0888 – 000		1	ELIMINATOR, STATIC CHARGE ジョデン シン	
6	FB2 – 1254 – 000		1	SHEET, PAPER GUIDE ガイド シート	
7	XA9 – 0425 – 000		4	SETSCREW, HEX SOCKET ロツカク アナツキ トメネジ	
8	FB3 – 5851 – 000		4	PLATE, ADJUSTING チョウセイ バン	
9	FB2 – 1270 – 000		1	PLATE, CLUTCH クラッチ バン	
10	WT2 – 5178 – 000		2	CLIP, CABLE ロッキング ワイヤ サドル	
11	WT2 – 5011 – 000		1	CLIP, CABLE エッジ サドル	
12	FB2 – 1242 – 000		1	ROLLER, INLET イリグチ ローラ	
13	FB2 – 1243 – 030		1	ROLLER, REVERSE ハンテン ローラ	
14	FB2 – 1244 – 000		1	ROLLER, FEED ハンソウ ローラ	
15	FB2 – 1245 – 000		1	ROLLER, D コシツキ ローラ (D)	
16	FB2 – 1246 – 000		1	ROLLER, F コシツキ ローラ (F)	
17	FB2 – 1248 – 000		1	MOUNT, SHAFT チュウケイ ジク シバン	
18	FB2 – 1250 – 000		1	CROSSMEMBER, INSIDE ステイ (ウチ)	
19	FB2 – 1252 – 000		1	ARM, RELEASE カイジョ アーム	
20	FB2 – 1256 – 000		1	GUIDE, CABLE ソクセン ガイド	
21	FB2 – 1258 – 000		4	SPRING, LEAF, 2 コロ カアツ バネ (2)	
22	FB2 – 1259 – 000		4	SPRING, LEAF, 3 イタ バネ (3)	
23	FB2 – 1263 – 000		1	MOUNT, SENSOR, 1 ジャムケン センサ シダイ (1)	
24	FB2 – 1264 – 000		1	MOUNT, SENSOR, 2 ジャムケン センサ シダイ (2)	
25	FB2 – 1265 – 000		1	SHAFT, DRIVE ヨウドウ クドウ ジク	
26	FB2 – 1266 – 000		1	STOP, ARM アーム ストッパ	
27	FB2 – 1268 – 000		1	PLATE, HINGE, RIGHT ヒンジ (ミギ)	
28	FB2 – 1269 – 000		1	SPRING, LEAF, SWITCH スイッチ バネ	
29	FB2 – 1316 – 000		1	ROLLER, FOAM RUBBER スポンジ ローラ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
316 – 30	FB2 – 1317 – 000		1	ROLLER, PRESSURE アッセツ ローラ	
31	FB2 – 6279 – 000		1	KNOB ノブ	
32	FC1 – 4813 – 000		2	LEVER, SENSOR センサ レバー	
33	FC1 – 4817 – 000		1	LEVER, SENSOR, JAM ジャム センサ レバー	
34	FC1 – 4818 – 000		3	MOUNT, SENSOR センサ ダイ	
35	FS5 – 8813 – 000		1	LABEL, "JAM NOB" ラベル	
36	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
37	FF5 – 2073 – 000		1	MOUNT, SHAFT ジク シバン	
38	FF5 – 2074 – 000		1	HOLDER, TENSIONER テンショナ バン	
39	FB2 – 6344 – 000		1	ROLLER コロ	
40	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J296
41	FF5 – 2076 – 000		1	PLATE, SWING GUIDE スウィング ガイド	
42	FF5 – 2182 – 000		1	LEVER, REVERSE ハンテン レバー	
43	XF9 – 0494 – 000		1	BELT, TIMING タイミング ベルト	
44	FF5 – 2211 – 000		1	HINGE, FRONT ヒンジ (マエ)	
45	FF5 – 2237 – 000		1	MOUNT, PAPER SENSOR カミ ツウカ センサ ダイ	
46	FF5 – 2295 – 000		1	COVER, REVERSE ハンテン カバー	
47	FF5 – 2324 – 000		1	PLATE, SWING ヨウドウ バン	
48	FB2 – 6285 – 000		9	SHIM ヒョウジュン ワッシャ	
49	FB2 – 9919 – 000		1	PLATE, GUIDE, MYLAR マイラ ガイド	
50	FG5 – 3217 – 000		1	POST – REVERSE HARNESS CABLE ハンテン ブンキ ウシロ ソクセン	J297,316
51	FH6 – 1041 – 000		1	MOTOR, DC24V DC モータ	M17 J287
52	FH7 – 7217 – 000		4	PHOTO – INTERRUPTER, TLP1215 フォトインタラプタ	PS29 – 31,39 J288 – 290,316
53	FS1 – 1250 – 000		1	BUSHING ブッシング	
54	WT2 – 5326 – 000		2	SUPPORT, CLIP バンド コテイ ダイ	
55	WT2 – 5041 – 000		6	TIE, CABLE ソクセン バンド	
56	FS2 – 6460 – 000		1	BUSHING ブッシング	
57	XA9 – 0724 – 000		4	SCREW,RS,M3X8 RS タイト ネジ	
58	FS4 – 2115 – 000		2	SPRING, TORSION ネジリ バネ	
59	FS4 – 2118 – 000		2	SPRING, TENSION ヒッパリ バネ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
316 – 60	FS4 – 2120 – 000		1	SPRING, TORSION ネジリ バネ	
61	FS4 – 2146 – 000		1	SPRING, TENSION ヒッパリ バネ	
62	FS5 – 0669 – 000		1	GEAR, 36T 36T ローラ ギア	
63	FS5 – 0670 – 000		1	GEAR, IDLER, 40T/24T 40T/24T アイドラ ギア	
64	FS5 – 0671 – 000		4	GEAR, IDLER, 20T 20T アイドラ ギア	
65	FS5 – 0672 – 000		1	PULLEY, GEAR, 50T 50T プーリ ギア	
66	FS5 – 0673 – 000		1	GEAR, 16T 16T ギア	
67	FS5 – 0674 – 000		1	GEAR, IDLER, 24T/16T 24T/16T アイドラ ギア	
68	FH7 – 5483 – 000		1	CLUTCH クラッチ	CL23 J296
69	FS5 – 3257 – 020		1	PULLEY, 31T 31T プーリ	
70	XZ9 – 0240 – 000		2	CATCH, MAGNET マグネット キヤツチ	
71	FS5 – 1375 – 000		2	BUSHING, HOOK SUPPORT フック ジクウケ	
72	FS5 – 2540 – 000		1	SPRING, TENSION ヒッパリ バネ	
73	FS5 – 2582 – 000		1	SPRING, TENSION ヒッパリ バネ	
74	FS5 – 2624 – 000		1	SPRING, TENSION ヒッパリ バネ	
75	WT2 – 0495 – 000		8	CLAMP, CABLE ケーブル クランプ	
76	FS5 – 3263 – 000		1	PULLEY, GEAR, 22T 22T プーリ ギア	
77	FS5 – 6156 – 000		12	ROLLER コロ	
78	FS5 – 6237 – 000		1	ROLLER, IDLER テンショナ コロ	
79	FS5 – 6248 – 000		2	ROLLER, PUSH – ON ツキアテ コロ	
80	FS5 – 9216 – 000		2	SCREW,STEPPED,M4X6 ダンビス	
81	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J297
82	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J287
83	WC4 – 5023 – 000		1	MICRO SWITCH マイクロ スイッチ	SW7
84	WT2 – 5056 – 000		6	CLIP, CABLE エッジ サドル	
85	XD9 – 0108 – 000		4	PIN,DOWEL ヘイコウ ピン	
86	XF9 – 0495 – 000		1	BELT, TIMING タイミング ベルト	
87	XG9 – 0211 – 000		12	BALL BEARING, MF128ZZ1MC3D4M ボール ベアリング	
88	FS5 – 1209 – 000		1	BUSHING ブッシング	
501	XB1 – 2300 – 609		6	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
316 – 502	XB6 – 7300 – 609		5	SCREW,TP,M3X6 TP ネジ	
503	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
504	XD2 – 1100 – 502		AR	RING,E E リング	
505	XD2 – 1100 – 642		AR	RING,E E リング	
506	XB6 – 7300 – 809		4	SCREW,TP,M3X8 TP ネジ	
507	XD2 – 2100 – 602		2	RING,GRIP グリップ リング	
508	XB1 – 2200 – 809		2	SCREW,MACH.,TRUSS HEAD,M2X8 バインド ネジ	
509	XB4 – 7400 – 809		8	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	
510	XD2 – 1100 – 322		1	RING,E E リング	
511	XD2 – 2100 – 802		1	RING,GRIP グリップ リング	

FIGURE 320 PRE-REGISTRATION GUIDE ASSEMBLY
レジスト前ガイド部


(Q1)
7C
7A
7
7B
(R1)
7E
(VR1)
7D
(J10)
501
2
(J176)
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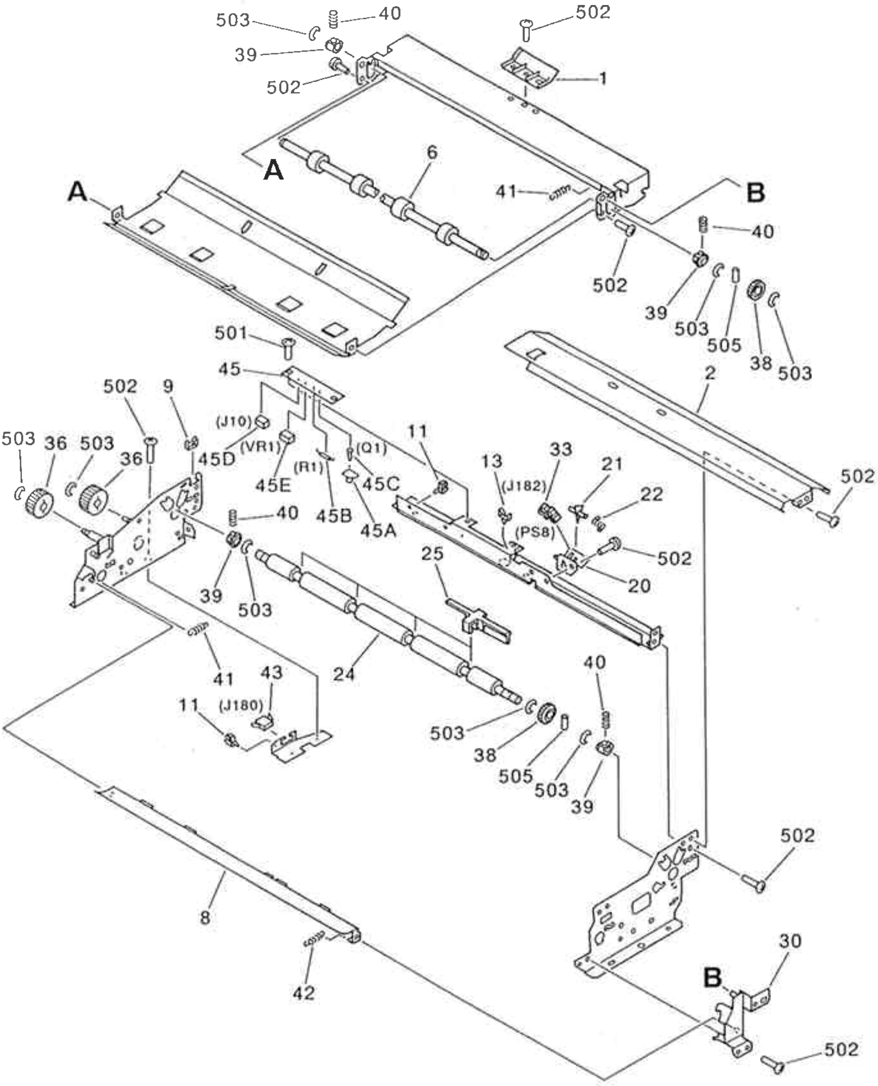
4
6
(J187)
502
8
502
5
2
1
2
9
2
502
8
502

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
320 –	FG5 – 5653 – 030		1	PRE – REGISTRATION GUIDE ASS'Y レジスト マエ ガイド ブ	
1	WT2 – 5300 – 000		2	CLIP, CABLE エッジ サドル	
2	WT2 – 5026 – 000		6	CLIP, CABLE クランプ	
3	WT2 – 5169 – 000		1	CLAMP, CABLE ソクセン バンド	
4	FG5 – 3144 – 000		1	CABLE, GUIDE, REGISTRATION レジ マエ ガイド タバセン	J176,187
5	FB2 – 9056 – 020		1	GUIDE, PRE – REGISTRATION, 3 レジ マエ ガイド (3)	
6	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J187
7	FG5 – 3179 – 000		1	OHP SENSOR ASSEMBLY 1 OHP センサ ブ (ジュコウ)	
7A	FA5 – 9710 – 000		1	CAP, SENSOR センサ キャップ	
7B	VR5 – 3680 – 511		1	RESISTOR, 510 OHM, 1/4W テイコウ	R1
7C	WG3 – 0103 – 000		1	PHOTO – TRANSISTOR, TPS611 フォト トランジスタ	Q1
7D	VS1 – 1029 – 003		1	PIN ASSEMBLY, 3P ピン アセンブリ	J10
7E	VR5 – 7260 – 502		1	RESISTOR, VARIABLE カヘン テイコウ	VR1
8	FS1 – 9102 – 000		2	SCREW,STEPPED,M3 ダンビス	
9	FS5 – 2571 – 000		1	SPRING, TENSION ヒッパリ バネ	
501	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 609		4	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	

FIGURE 351 PRE-REGISTRATION FEEDER ASSEMBLY (1/2)
レジスト前搬送部 (1/2)


503
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503
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503
36
(J10)
45D
(VR1)
(R1)
(Q1)
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33
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22
45E
45B
45C
45A
(J182)
(PS8)
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502
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39
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25
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43
24
40
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(J180)
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505
503
39
502
8
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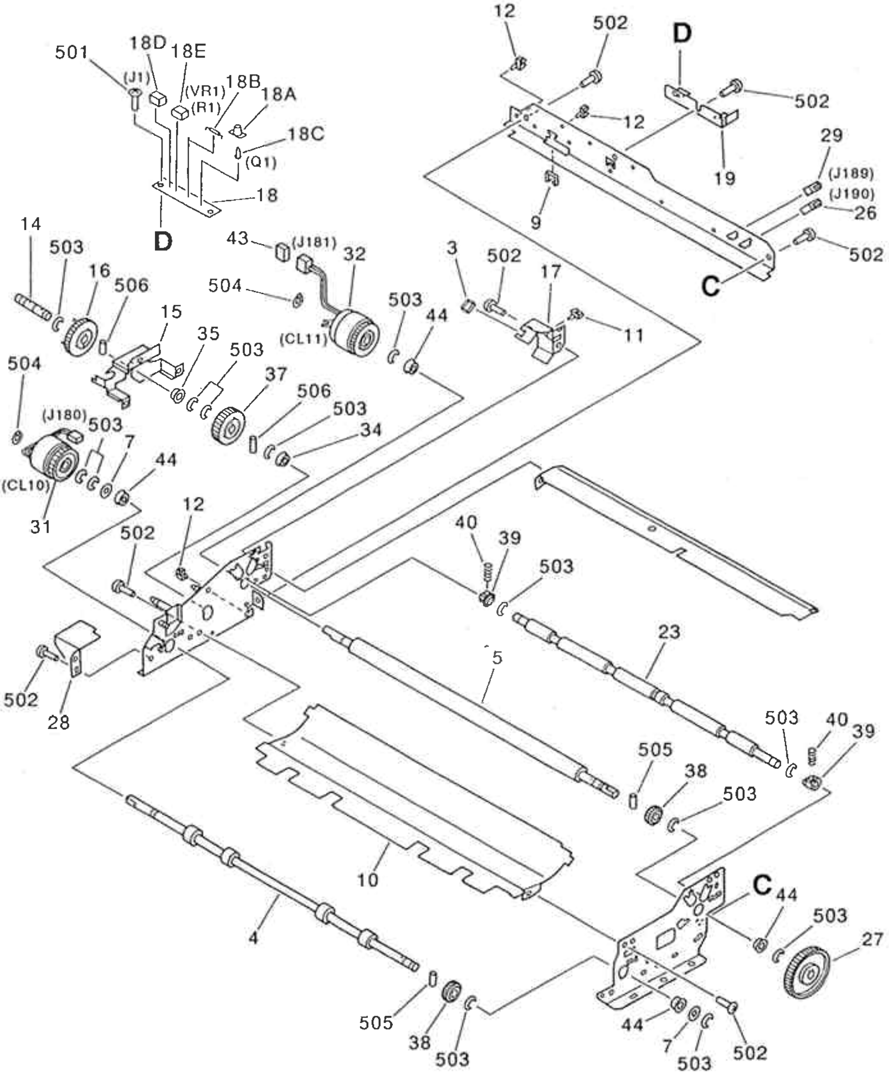
B
42
502

FIGURE 351

PRE-REGISTRATION FEEDER ASSEMBLY (2/2)
レジスト前搬送部 (2/2)



501
(J1)
18D
18E
(VR1)
(R1)
18B
18A
18C
(Q1)
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506
503
34
504
(J180)
503
7
44
(CL10)
31
43
(J181)
32
504
(CL11)
503
44
3
502
17
11
12
502
D
502
12
19
9
29
(J189)
(J190)
26
502
C
12
502
502
28
40
39
503
5
23
10
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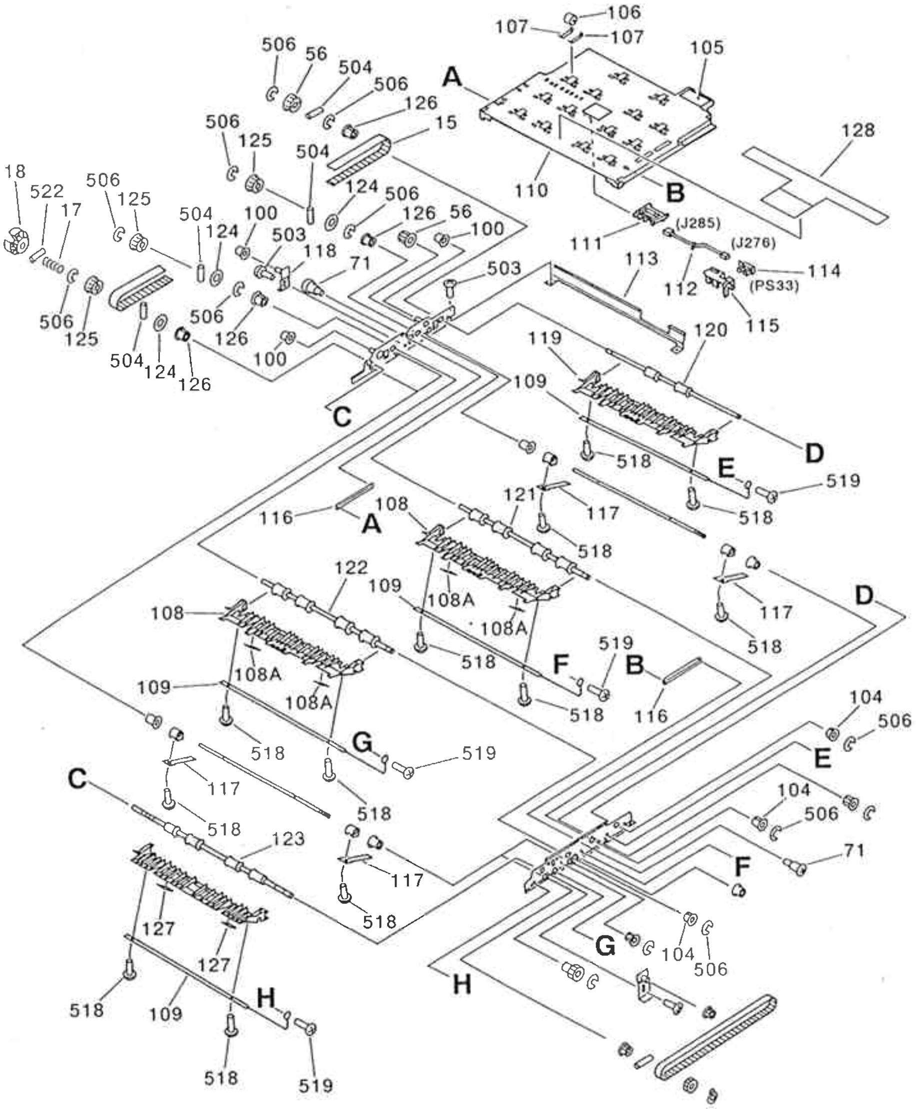
505
38
503
505
38
503
503
40
39
C
44
503
27
44
7
503
502

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
351 -	FG5 - 5654 - 000		1	PRE - REGISTRATION FEEDER ASS'Y レジスト マエ ハンソウ ブ	
1	FB2 - 1019 - 000		1	GRIP, GUIDE ガイド グリップ	
2	FB2 - 1020 - 000	N	1	COVER, HARNESS ハーネス カバー	
3	WT2 - 5056 - 000		2	CLIP, CABLE エッジ サドル	
4	FB2 - 1023 - 000		1	ROLLER, FEED DRIVE, 1 ハンソウ クドウ ローラ (1)	
5	FB2 - 1024 - 000		1	ROLLER, FEED DRIVE, 2 ハンソウ クドウ ローラ (2)	
6	FB2 - 1025 - 000		1	ROLLER, IDLER, FEED ハンソウ ジュウドウ ローラ	
7	FB2 - 6285 - 000		2	SHIM ヒョウジュン ワッシャ	
8	FB2 - 1027 - 000		1	GUIDE, SWING, 2 ヨウドウ ガイド (2)	
9	WT2 - 5035 - 000		3	CLIP, CABLE エッジ サドル	
10	FB2 - 1029 - 000		1	GUIDE, LOWER ガイド (シタ)	
11	WT2 - 5026 - 000		4	CLIP, CABLE クランプ	
12	WT2 - 0434 - 000		9	CLIP, CABLE ロッキング ワイヤ サドル	
13	WT2 - 0276 - 000		2	CLAMP, CABLE コード クランプ	
14	FB2 - 1033 - 000		1	SHAFT, DRIVE クドウ シャフト	
15	FB2 - 1034 - 000		1	MOUNT, SUPPORT, DRIVE クドウ シジ ダイ	
16	FB2 - 1035 - 000		1	COUPLING, DRIVE クドウ カップリング	
17	FB2 - 1036 - 000		1	MOUNT, HARNESS ハーネス ダイ	
18	FG5 - 3178 - 000		1	OHP SENSOR ASSEMBLY 2 OHP センサ ブ (ハツコウ)	
18A	FA5 - 9710 - 000		1	CAP, SENSOR センサ キャップ	
18B	VR5 - 3680 - 510		1	RESISTOR, 51 OHM, 1/4W テイコウ	R1
18C	WG1 - 5370 - 000		1	LED, TLN110 LED	Q1
18D	VS1 - 1029 - 002		1	PIN ASSEMBLY, 2P ピン アセンブリ	J1
18E	VR5 - 7260 - 501		1	RESISTOR, VARIABLE カヘン テイコウ	VR1
19	FB2 - 1039 - 000		1	MOUNT, SENSOR, 2 センサ マウント (2)	
20	FB2 - 1040 - 000		1	MOUNT, SENSOR, 3 センサ マウント (3)	
21	FB2 - 1041 - 000		1	LEVER, SENSOR センサ レバー	
22	FB2 - 1426 - 000		1	SPRING, TORSION ネジリ バネ	
23	FB2 - 1427 - 000		1	ROLLER, INLET レジスト イリグチ ローラ	
24	FB2 - 1428 - 000		1	ROLLER, OUTLET レジスト デグチ ローラ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
351 – 25	FB2 – 1429 – 000		4	GUIDE, MIDDLE ガイド (ナカ)	
26	VS1 – 5057 – 007		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J190
27	FB2 – 6273 – 000		1	HANDLE, P – PRG, FRONT レジスト ハンドル (マエ)	
28	FB2 – 6274 – 000		1	COVER, CLUTCH クラッチ カバー	
29	VS1 – 5057 – 005		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J189
30	FF5 – 4013 – 000		1	PLATE, SUPPORT, SWING ヨウドウ シジ バン	
31	FH7 – 5372 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL10 J180
32	FH7 – 5474 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL11 J181
33	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS8 J182
34	FS1 – 1202 – 000		1	BUSHING ブッシング	
35	FS1 – 1510 – 000		1	BUSHING ブッシング	
36	FS2 – 0484 – 000		2	GEAR, 25T 25T ギア	
37	FS2 – 0485 – 000		1	GEAR, 32T 32T ギア	
38	FS5 – 0338 – 000		4	GEAR, 16T 16T ギア	
39	FS5 – 1211 – 000		6	BUSHING ブッシング	
40	FS5 – 2285 – 000		6	SPRING, COMPRESSION アッシュク バネ	
41	FS5 – 2572 – 000		2	SPRING, TENSION ヒッパリ バネ	
42	FS5 – 2573 – 000		1	SPRING, TENSION ヒッパリ バネ	
43	VS1 – 5057 – 002		2	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J180,181
44	XG9 – 0211 – 000		4	BALL BEARING, MF128ZZ1MC3D4M ボール ベアリング	
45	FG5 – 3179 – 000		1	OHP SENSOR ASSEMBLY 1 OHP センサ ブ (ジュコウ)	
45A	FA5 – 9710 – 000		1	CAP, SENSOR センサ キャップ	
45B	VR5 – 3680 – 511		1	RESISTOR, 510 OHM, 1/4W テイコウ	R1
45C	WG3 – 0103 – 000		1	PHOTO – TRANSISTOR, TPS611 フォト トランジスタ	Q1
45D	VS1 – 1029 – 003		1	PIN ASSEMBLY, 3P ピン アセンブリ	J10
45E	VR5 – 7260 – 502		1	RESISTOR, VARIABLE カヘン テイコウ	VR1
501	XB1 – 2300 – 609		4	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XD2 – 1100 – 642		AR	RING,E E リング	
504	XD2 – 2100 – 802		2	RING,GRIP グリップ リング	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
351 – 505	XD3 – 2200 – 102		4	PIN,DOWEL ヘイコウ ピン	
506	XD3 – 2200 – 162		2	PIN,DOWEL ヘイコウ ピン	

FIGURE 365 HOLDING TRAY ASSEMBLY (CLC950) (1/3)
中間トレイ部 (CLC950) (1/3)



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123
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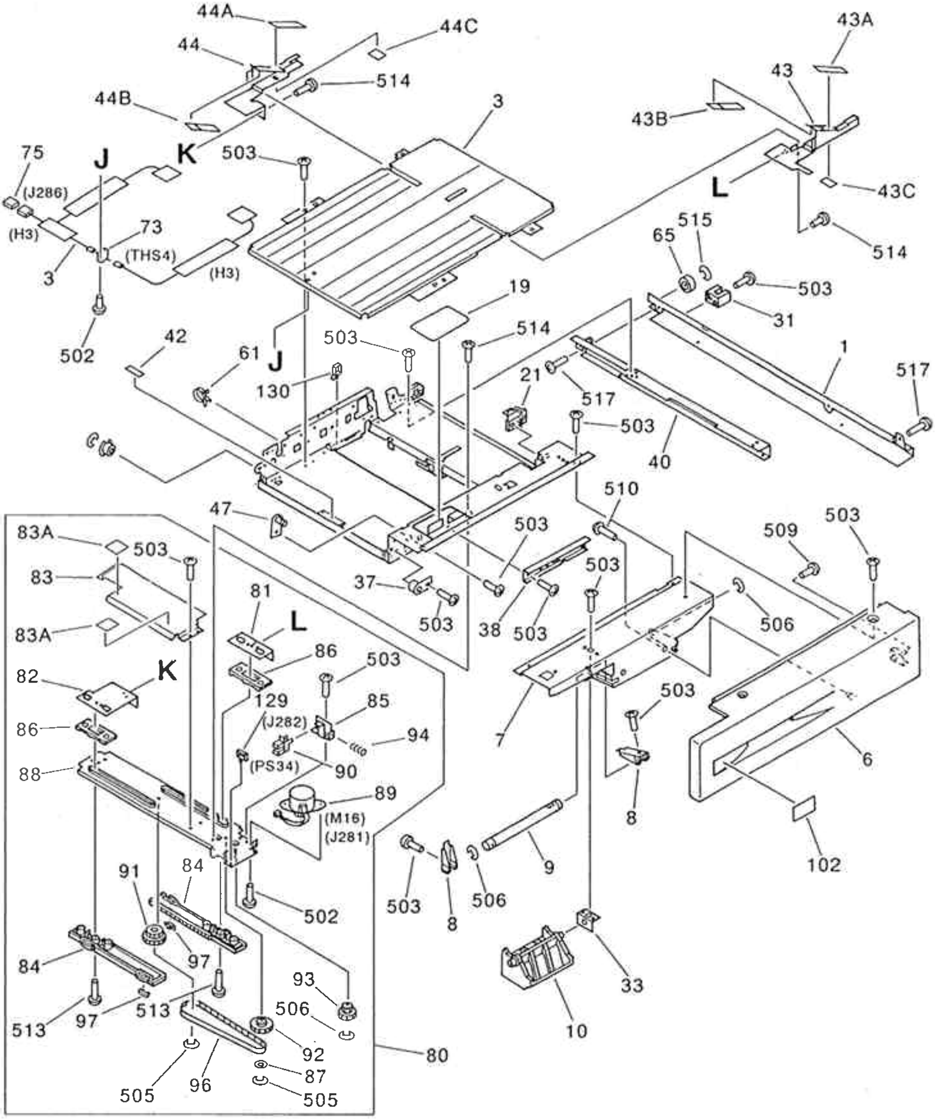
NOTE : This assembly does not include the part shown with key No. 102.

注 : このユニットに、 Key No. 102の部品は含まれません。

FIGURE 365 HOLDING TRAY ASSEMBLY (CLC950) ($^2/_3$)
中間トレイ部（CLC950）（$^2/_3$）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43C
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(H3)
73
(THS4)
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502
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65
515
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19
1
42
61
J
503
130
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21
517
517
503
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510
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83A
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81
L
83A
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129
(J282)
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(PS34)
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(M16)
(J281)
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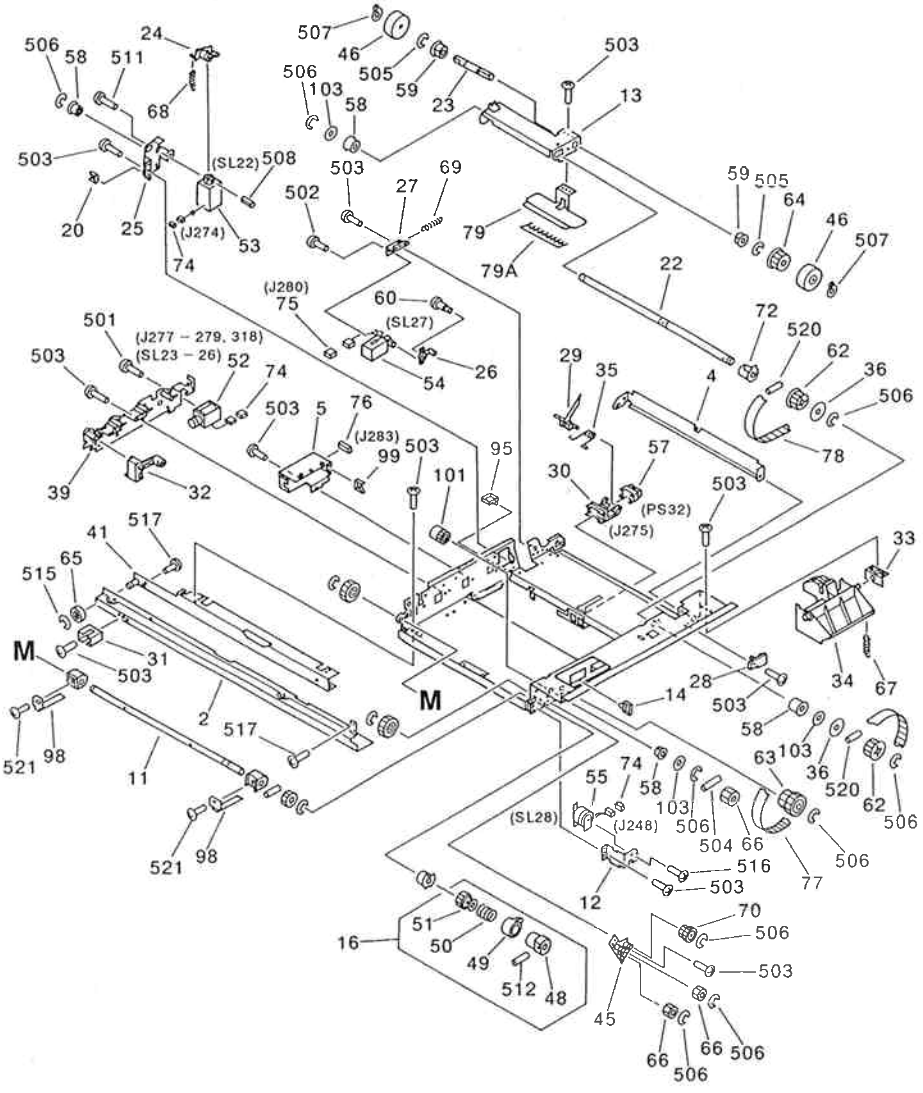
FIGURE 365

HOLDING TRAY ASSEMBLY (CLC950) ($^3/_3$)
中間トレイ部（CLC950）（$^3/_3$）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(SL22)
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(J274)
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79A
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(J280)
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(SL27)
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501
(J277 – 279, 318)
(SL23 – 26)
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(J283)
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(PS32)
(J275)
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515
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503
14
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103
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98
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74
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103
506
504
66
(SL28)
(J248)
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FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
365 –	FG5 – 3692 – 110		1	HOLDING TRAY ASSEMBLY チュウカン トレイ ブ	CLC950 100V
	FG5 – 3693 – 110		1	HOLDING TRAY ASSEMBLY チュウカン トレイ ブ	CLC950 120V
	FG5 – 3694 – 110		1	HOLDING TRAY ASSEMBLY チュウカン トレイ ブ	CLC950 220/240V
1	FB2 – 1271 – 020		1	RAIL, RIGHT ミギ レール	
2	FB2 – 1273 – 030		1	RAIL, LEFT ヒダリ レール	
3	FF2 – 9088 – 000		1	PLATE, HEATER ヒータ ガイド	100V H3 J286
	FF2 – 9089 – 000		1	PLATE, HEATER ヒータ ガイド	120V H3 J286
	FF2 – 9090 – 000		1	PLATE, HEATER ヒータ ガイド	220/240V H3 J286
4	FB2 – 1279 – 000		1	SHUTTER シャッタ	
5	FB2 – 1416 – 000		1	PLATE, CONNECTOR コネクタ バン (デッキ)	
6	FB2 – 1862 – 000		1	COVER, TRAY, HOLDING チュウカン トレイ カバー	
7	FB2 – 1863 – 000		1	HINGE, DOOR カバー シバン	
8	FB2 – 1864 – 000		2	ARM アーム	
9	FB2 – 1865 – 000		1	SHAFT, ARM アーム ジク	
10	FB2 – 1866 – 000		1	KNOB トッテ	
11	FB2 – 6255 – 000		1	SHAFT, DRIVE クドウ ジク	
12	FB2 – 6257 – 000		1	MOUNT, SOLENOID ソレノイド ダイ	
13	FB2 – 6259 – 000		1	ARM, GUIDE ガイド アーム	
14	WT2 – 0495 – 000		3	CLAMP, CABLE ケーブル クランプ	
15	XF9 – 0492 – 000		1	BELT, TIMING タイミング ベルト	
16	FG5 – 2708 – 050		1	CLUTCH ASSEMBLY カイテン クラッチ ブ	
17	FS4 – 2122 – 000		1	SPRING, COMPRESSION アッシュク バネ	
18	FC1 – 4922 – 000		1	COUPLING カップリング	
19	FS6 – 8075 – 000		1	LABEL, "JAM RESET" ジャム ショリ ラベル	
20	WT2 – 5035 – 000		3	CLIP, CABLE エッジサドル	
21	FC1 – 4902 – 000		1	CAM, INTERLOCK, LOWER インターロック カム (シタ)	
22	FC1 – 4908 – 000		1	SHAFT, DRIVE クドウ ジク	
23	FC1 – 4911 – 000		1	SHAFT, ROLLER ローラ ジク	
24	FC1 – 4912 – 000		1	LEVER, SOLENOID ソレノイド レバー	
25	FC1 – 4913 – 000		1	MOUNT, SOLENOID ソレノイド ダイ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
365 – 26	FC1 – 4915 – 000		1	LEVER, SHUTTER シャッタ レバー	
27	FC1 – 4916 – 000		1	MOUNT, SHUTTER SOLENOID シャッタ ソレノイド ダイ	
28	FC1 – 4917 – 000		1	BLOCK ブロック	
29	FC1 – 4918 – 000		1	ARM, SENSOR センサ アーム	
30	FC1 – 4919 – 000		1	HOLDER, SENSOR センサ ホルダ	
31	FC1 – 4920 – 000		2	BLOCK, RAIL SLIDING レール スライダ	
32	FC1 – 4921 – 020		4	LEVER, DEFLECTOR フラッパ レバー	
33	FC1 – 4923 – 000		2	PLATE, KNOB トッテ バン	
34	FC1 – 4926 – 000		1	KNOB トッテ	
35	FC1 – 4929 – 000		1	SPRING, TORSION ネジリ バネ	
36	FC1 – 4930 – 000		2	FLANGE フランジ	
37	FC1 – 4931 – 000		2	MOUNT, FEEDER ハンソウ シダイ	
38	FC1 – 4937 – 000		1	PLATE, REINFORCEMENT トレイ ホキョウ バン	
39	FF2 – 7207 – 030		1	MOUNT, SOLENOID ソレノイド ダイ	
40	FF5 – 2192 – 020		1	CROSSMEMBER, RAIL, RIGHT ミギ レール ステイ	
41	FF5 – 2193 – 030		1	CROSSMEMBER, RAIL, LEFT ヒダリ レール ステイ	
42	FB2 – 9918 – 000		1	SHEET, INSULATING ゼツエン シート	
43	FF5 – 2239 – 000		1	PLATE, SIDE, FRONT サイド キセイ バン (マエ)	
43A	FC1 – 4933 – 020		1	RETAINING SHEET, MIDDLE ナカ シート オサエ	
43B	FC1 – 4934 – 000		1	RETAINING SHEET, LEADING EDGE センタン シート オサエ	
43C	FC1 – 4936 – 000		1	SHEET シート	
44	FF5 – 2240 – 000		1	PLATE, SIDE, REAR サイド キセイ バン (ウシロ)	
44A	FC1 – 4933 – 020		1	RETAINING SHEET, MIDDLE ナカ シート オサエ	
44B	FC1 – 4934 – 000		1	RETAINING SHEET, LEADING EDGE センタン シート オサエ	
44C	FC1 – 4936 – 000		1	SHEET シート	
45	FF5 – 2273 – 000		1	SPINDLE カシメ ダイ	
46	FF5 – 2274 – 000		2	ROLLER, FORM RUBBER スポンジ ローラ	
47	FF5 – 2275 – 000		1	MOUNT, IDLER アイドラ ダイ	
48	FB2 – 6253 – 000		1	BOSS ボス	
49	FB2 – 6254 – 020		1	RING, CONTROL セイギョ カン	

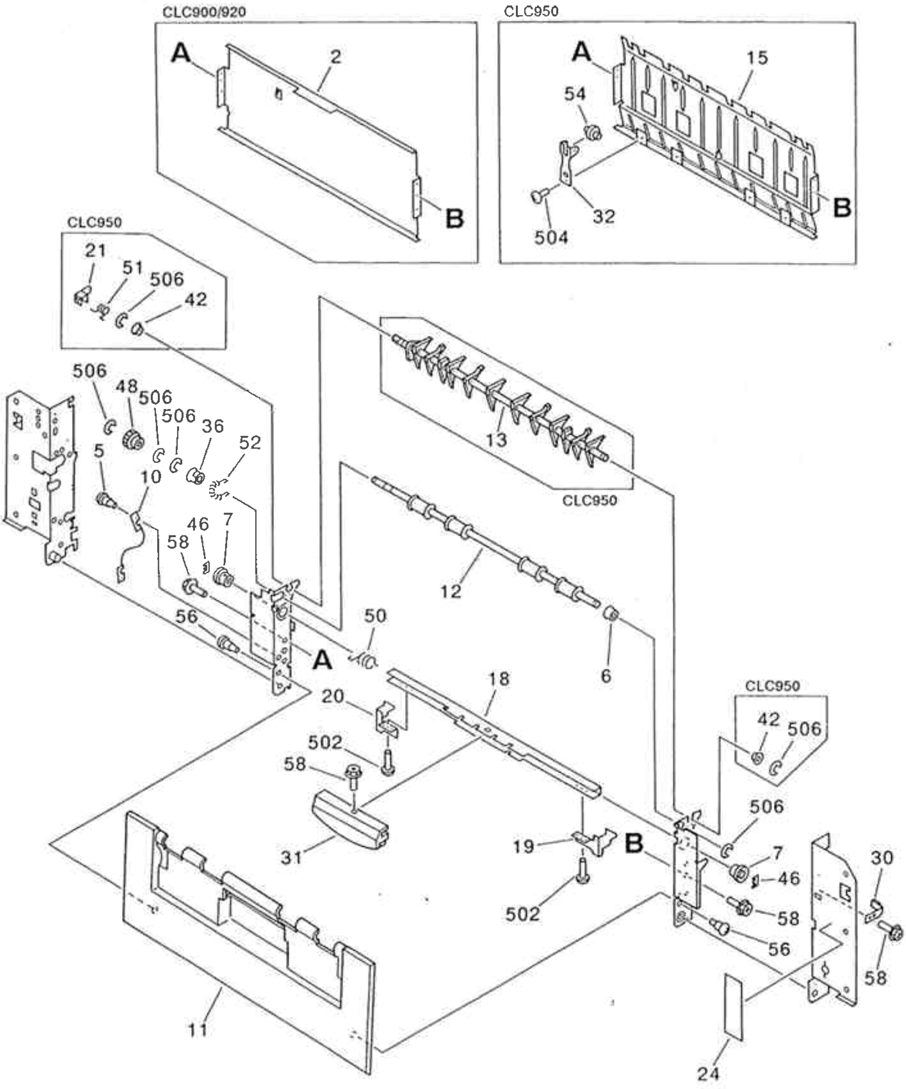
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
365 – 50	FS1 – 2651 – 000		1	SPRING, TORSION ネジリ バネ	
51	FS5 – 0746 – 000		1	GEAR, CLUTCH クラッチ ギア	
52	FH7 – 5460 – 000		4	SOLENOID, DC24V ソレノイド	SL23 – 26 J277 – 279,318
53	FH7 – 5418 – 000		1	SOLENOID, DC24V ソレノイド	SL22 J274
54	FH7 – 5420 – 000		1	SOLENOID, DC24V ソレノイド	SL27 J280
55	FH7 – 5478 – 000		1	SOLENOID, DC24V ソレノイド	SL28 J248
56	FS5 – 3259 – 000		2	PULLEY, TIMING, 30T タイミング プーリ 30T	
57	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS32 J275
58	XG9 – 0264 – 000		4	BEARING, BALL ボール ベアリング	
59	FS1 – 1512 – 000		2	BUSHING ブッシング	
60	FS1 – 9004 – 000		1	SCREW,STEPPED,M4 ダンビス	
61	WT2 – 0365 – 000		4	CLIP, CABLE ソクセン バンド	
62	FS2 – 3614 – 000		2	PULLEY, 32T 32T プーリ	
63	FS2 – 3615 – 000		1	PULLEY, 32T/GEAR, 30T 32T プーリ /30T ギア	
64	FS2 – 3618 – 000		1	PULLEY, 32T 32T プーリ	
65	FS2 – 6459 – 000		2	ROLLER コロ	
66	FS4 – 0127 – 000		3	GEAR, 18T 18T ギア	
67	FS4 – 2116 – 000		1	SPRING, TENSION ヒッパリ バネ	
68	FS4 – 2126 – 000		1	SPRING, TENSION ヒッパリ バネ	
69	FS4 – 2128 – 000		1	SPRING, TENSION ヒッパリ バネ	
70	FS5 – 0747 – 000		1	GEAR, 24T/18T 24T/18T ギア	
71	FS1 – 9010 – 000		2	SCREW,STEPPED,M3X2.2 ダンビス	
72	FS5 – 1209 – 000		1	BUSHING ブッシング	
73	FH7 – 6203 – 000		1	THERMOSWITCH サーモスイッチ	THS4
74	VS1 – 5057 – 002		6	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J248,274,277 – 279,318
75	VS1 – 5057 – 003		2	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J280,286
76	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J283
77	XF9 – 0396 – 000		1	BELT, TIMING タイミング ベルト	
78	XF9 – 0425 – 000		1	BELT, TIMING タイミング ベルト	
79	FF5 – 2282 – 000		1	GUIDE, LOWER シタ ガイド	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
365 – 79A	FC1 – 5467 – 000		1	ELIMINATOR, STATIC CHARGE ジョデン キ	
80	FG5 – 2712 – 030		1	SIDE GUIDE PLATE ASSEMBLY サイド キセイ バン ブ	
81	FB2 – 1287 – 000		1	BRACKET, FRONT スライド バン (マエ)	
82	FB2 – 1288 – 000		1	BRACKET, REAR スライド バン (ウシロ)	
83	FF5 – 2307 – 000		1	GUIDE, RAIL, UPPER レール ウエ ガイド	
83A	FB2 – 6297 – 000		2	SHEET, INSULATING ゼツエン シート	
84	FC1 – 4893 – 000		2	RACK ラック	
85	FC1 – 4898 – 000		1	MOUNT, SENSOR センサ ダイ	
86	FC1 – 4899 – 000		2	PIN, SLIDE スライダ	
87	FC1 – 4935 – 000		1	FLANGE フランジ	
88	FF2 – 7211 – 000		1	PLATE, SIDE, RAIL サイド キセイ レール バン	
89	FH7 – 1885 – 000		1	MOTOR, DC24V DC モータ	M16 J281
90	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS34 J282
91	FS2 – 3612 – 000		1	PULLEY, 60T/GEAR, 28T 60T プーリ /28T ギア	
92	FS2 – 3613 – 000		1	PULLEY, 24T/GEAR, 35T 24T プーリ /35T ギア	
93	FS3 – 0955 – 000		1	GEAR, 14T/28T 14T/28T ギア	
94	FS4 – 2143 – 000		1	SPRING, COMPRESSION アッシュク バネ	
95	WT2 – 0317 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
96	XF9 – 0348 – 000		1	BELT, TIMING タイミング ベルト	
97	FB3 – 0879 – 000		2	SPRING, LEAF イタ バネ	
98	FB2 – 6250 – 000		2	BLADE, PADDLE パドル ハネ	
99	WT2 – 0204 – 000		3	CLIP, CABLE エッジ サドル	
100	FS2 – 6458 – 000		3	ROLLER コロ	
101	FS5 – 0745 – 000		1	GEAR, IDLER, 18T 18T, アイドラ ギア	
102	FS8 – 8871 – 000		1	LABEL, "DUPLEXING UNIT" リョウメン ユニット ラベル	SEE NOTE
103	FB2 – 6285 – 000		3	SHIM ヒョウジュン ワッシャ	
104	FS2 – 1544 – 000		3	BUSHING ブッシング	
105	FC1 – 4837 – 000		1	LABEL, "JAM RESET" ジャム ショリ ラベル	
106	FC1 – 4833 – 000		14	ROLLER コロ	
107	FC1 – 4834 – 000		28	SPRING, LEAF イタ バネ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
365 – 108	FF5 – 2279 – 000		2	DEFLECTOR, 2 フラッパ (2)	
108A	FB2 – 6275 – 000		2	SHEET, DEFLECTOR フラッパ シート	
109	FB2 – 1294 – 000		4	ELIMINATOR, STATIC CHARGE ジョデン キ	
110	FC1 – 4830 – 000		1	GUIDE, UPPER ウエ ガイド	
111	FC1 – 4839 – 000		1	MOUNT, SENSOR センサ ダイ	
112	FF2 – 8131 – 000		1	CABLE, FEEDER ハンソウ ソクセン	J276,285
113	FB2 – 1284 – 000		1	PLATE ホキョウ ステイ	
114	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS33 J276
115	FC1 – 4838 – 000		1	LEVER, SENSOR ケンチ レバー	
116	FC1 – 4513 – 000		2	LEVER レバー	
117	FB2 – 6250 – 000		6	BLADE, PADDLE パドル ハネ	
118	FF5 – 2281 – 000		1	PLATE, TENSION, 2 テンショナ バン (2)	
119	FB2 – 6247 – 000		1	DEFLECTOR, 3 フラッパ (3)	
120	FB2 – 1293 – 000		1	ROLLER, FEED, 4 ハンソウ ローラ (4)	
121	FB2 – 9926 – 000		1	ROLLER, FEED, 3 ハンソウ ローラ (3)	
122	FB2 – 9925 – 000		1	ROLLER, FEED, 2 ハンソウ ローラ (2)	
123	FB2 – 9924 – 000		1	ROLLER, FEED, 1 ハンソウ ローラ (1)	
124	FC1 – 4779 – 000		3	FLANGE フランジ	
125	FS2 – 3602 – 000		3	PULLEY, 40T 40T プーリ	
126	FS2 – 1545 – 000		4	BUSHING ブッシング	
127	FB2 – 6275 – 000		2	SHEET, DEFLECTOR フラッパ シート	
128	FY1 – 1128 – 000		1	SHEET, INSULATION ダンネツ シート	
129	WT2 – 5134 – 000		13	CLAMP, CABLE クランプ	
130	WT2 – 5127 – 000		3	TIE, CABLE ソクセン バンド	
501	XB6 – 7300 – 409		8	SCREW,TP,M3X4 TP ネジ	
502	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
504	XD3 – 2200 – 102		5	PIN,DOWEL ヘイコウ ピン	
505	XD2 – 1100 – 502		4	RING,E E リング	
506	XD2 – 1100 – 642		AR	RING,E E リング	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
365 – 507	XD2 – 2100 – 602		2	RING,GRIP グリップ リング	
508	XD3 – 1300 – 102		1	PIN,SPRING スプリング ピン	
509	XB1 – 2400 – 606		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
510	XB4 – 7400 – 809		2	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	
511	XB6 – 7300 – 405		3	SCREW,TP,M3X4 TP ネジ	
512	XB6 – 2400 – 508		1	SETSCREW,M4X5 ロッカク アナツキ トメネジ	
513	XB1 – 2401 – 209		2	SCREW,MACH.,TRUSS HEAD,M4X12 バインド ネジ	
514	XB6 – 7400 – 609		AR	SCREW,TP,M4X6 TP ネジ	
515	XD2 – 1100 – 402		2	RING,E E リング	
516	XB1 – 2300 – 809		1	SCREW,MACH.,TRUSS HEAD,M3X8 バインド ネジ	
517	XB1 – 2400 – 806		4	SCREW,MACH.,TRUSS HEAD,M4X8 バインド ネジ	
518	XB3 – 2300 – 609		AR	SCREW,TAPPING,TRUSS HEAD,M3X6 バインド タッピン ネジ	
519	XB1 – 2400 – 309		4	SCREW,MACH.,TRUSS HEAD,M4X3 バインド ネジ	
520	XD3 – 2200 – 122		AR	PIN,DOWEL ヘイコウ ピン	
521	XB2 – 2300 – 605		2	SCREW,W/WASHER,M3X6 バネツキ ナベ ネジ	
522	XD3 – 2200 – 142		6	PIN,DOWEL ヘイコウ ピン	

FIGURE 370 DELIVERY ASSEMBLY (${}^{1}/_{2}$)
排紙部 (${}^{1}/_{2}$)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CLC950
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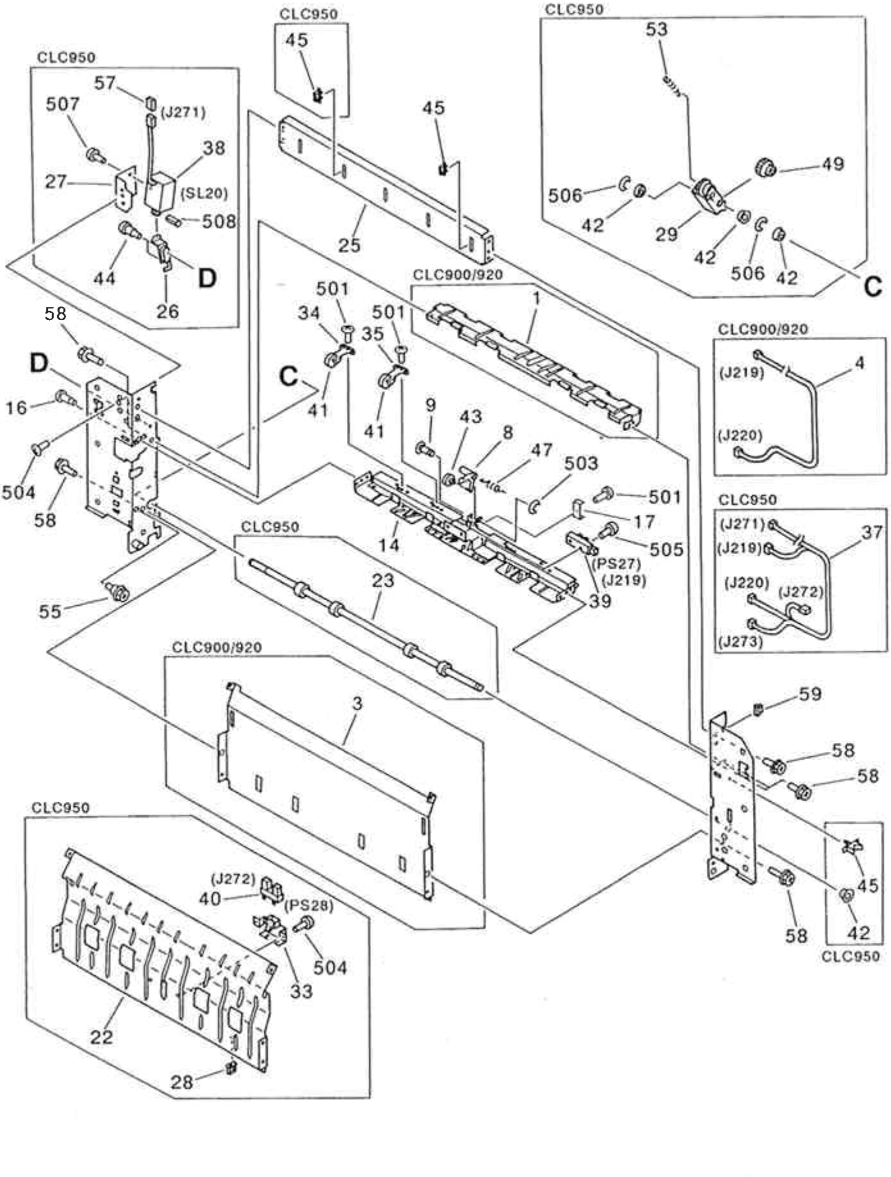
FIGURE 370 DELIVERY ASSEMBLY ($^2/_2$)
排紙部 ($^2/_2$)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43
8
47
503
501
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CLC900/920
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CLC950
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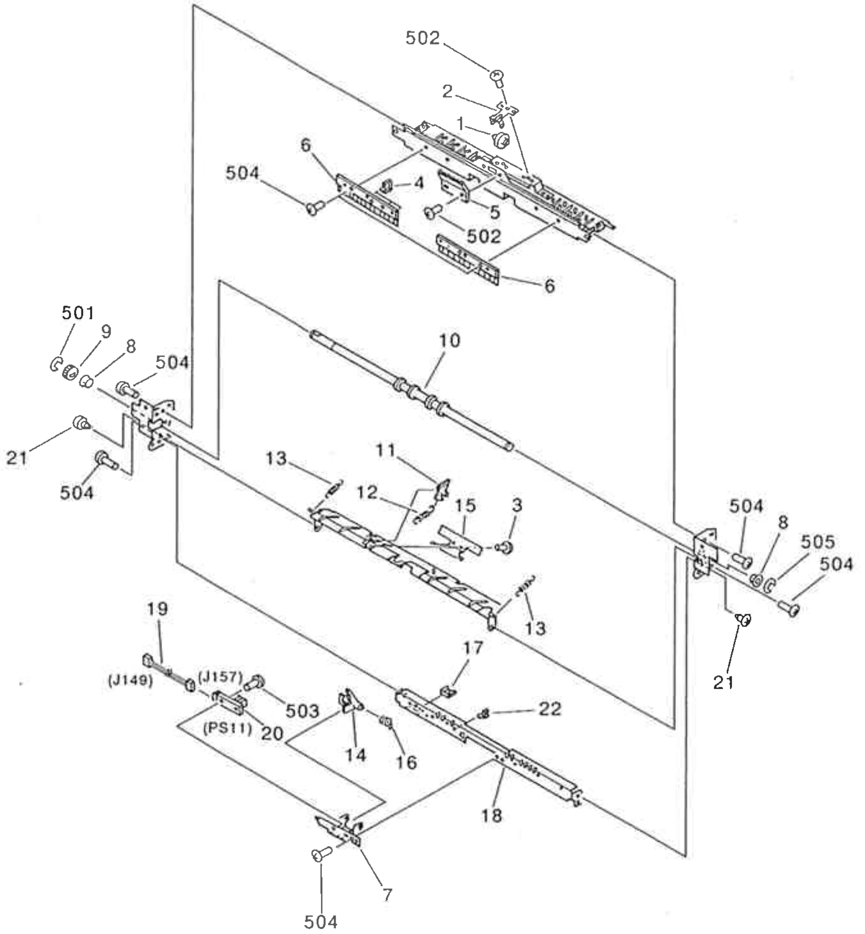
(J220)
(J272)
(J273)
CLC950
23
55
CLC900/920
3
59
58
58
45
42
58
CLC950
CLC950
(J272)
40
(PS28)
504
33
22
28

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
370 –	FG5 – 5650 – 110		1	DELIVERY ASSEMBLY ハイシ ブ	CLC900 EXCEPT PFE CLC920
	FG5 – 7131 – 000		1	DELIVERY ASSEMBLY ハイシ ブ	CLC900 PFE
	FG5 – 5651 – 090		1	DELIVERY ASSEMBLY ハイシ ブ	CLC950
1	FB3 – 1457 – 000		1	GUIDE, DELIVERY, LOWER ハイシ ガイド (シタ)	CLC900/920
2	FB2 – 4427 – 000		1	CROSSMEMBER, DELIVERY DOOR ハイシ トビラ ステイ	CLC900/920
3	FB2 – 8887 – 000		1	CROSSMEMBER, DELIVERY, LOWER ハイシ シタ ステイ	CLC900/920
4	FG5 – 3125 – 000		1	CABLE, SENSOR, DELIVERY ハイシ センサ ソクセン	CLC900/920 J219,220
5	FS5 – 9163 – 000		2	SCREW, STEPPED, M4 ダンビス	
6	FS1 – 1512 – 000		1	BUSHING ブッシング	CLC900/920
	FS1 – 1206 – 000		1	BUSHING ブッシング	CLC950
7	FA2 – 8244 – 000		2	BUSHING ブッシング	
8	FB2 – 8730 – 000		1	LEVER, SENSOR センサ レバー	
9	FB2 – 9892 – 000		1	SHAFT, SENSOR ジク	
10	FB1 – 7041 – 000		1	WIRE, DOOR SUPPORT ミギ トビラ ササエ ワイヤ	
11	FB2 – 1840 – 000		1	COVER, DELIVERY ハイシ カバー	
12	FB2 – 4400 – 000		1	ROLLER, DELIVERY ハイシ ローラ	
13	FB2 – 4401 – 000		1	DEFLECTOR フラッパ	CLC950
14	FB2 – 9159 – 000		1	GUIDE, PAPER, UPPER ハイシ ガイド (ウエ)	
15	FB2 – 4403 – 000		1	GUIDE, VERTICAL PATH, LEFT タテパス ガイド (ヒダリ)	CLC950
16	FS1 – 9009 – 000		1	SCREW,STEPPED,M3 ダンビス	
17	FB3 – 1784 – 000		1	PLATE, LIMIT キセイ バン	
18	FB2 – 4406 – 000		1	SHAFT, LEVER レバー ジク	
19	FB2 – 4407 – 000		1	HOOK, FRONT フック (マエ)	
20	FB2 – 4408 – 000		1	HOOK, REAR フック (ウシロ)	
21	FB2 – 4409 – 000		1	ARM, DEFLECTOR フラッパ アーム	CLC950
22	FB2 – 4412 – 000		1	GUIDE, VERTICAL PATH, RIGHT タテパス ガイド (ミギ)	CLC950
23	FB2 – 4413 – 000		1	ROLLER, VERTICAL PATH タテパス ローラ	CLC950
24	FS6 – 8076 – 020		1	LABEL, "CAUTION" チュウイ ラベル	EXCEPT CLC900 PFE
	FC2 – 3092 – 000		1	LABEL, "CAUTION" チュウイ ラベル	CLC900 PFE
25	FB2 – 8888 – 000		1	CROSSMEMBER, FRONT ハイシ ステイ (ウエ)	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
370 – 26	FB2 – 4417 – 000		1	LEVER, DEFLECTOR フラッパ レバー	CLC950
27	FB2 – 4418 – 000		1	MOUNT, SOLENOID ソレノイド シバン	CLC950
28	WT2 – 0317 – 000		4	CLIP, CABLE ロッキング ワイヤ サドル	CLC950
29	FF5 – 2348 – 000		1	GEAR, 20T 20T ギア	CLC950
30	FB2 – 8721 – 000		1	PLATE, STOP ストッパ	
31	FB2 – 4434 – 000		1	HANDLE トッテ	
32	FB2 – 6272 – 000		4	HOLDER, ROLLER コロ ホルダ	CLC950
33	FF2 – 4832 – 000		1	MOUNT, SENSOR カミ ツウカ センサ ダイ	CLC950
34	FB3 – 1444 – 000		2	PLATE, ROLLER ローラ プレート	
35	FB2 – 8889 – 000		2	ROLLER, DELIVERY, UPPER, 1 ハイシ コロ (ウエ 1)	
36	FS1 – 1596 – 000		1	BUSHING ブッシング	
37	FG5 – 3218 – 000		1	CABLE, VERTICAL PATH, DELIVERY ハイシ タテパス ソクセン	CLC950 J219,220,271 – 273
38	FH7 – 5400 – 000		1	SOLENOID, DC24V ソレノイド	CLC950 SL20 J271
39	FH7 – 7306 – 000		1	PHOTO – INTERRUPTER, S7G37 フォトインタラプタ	PS27 J219
40	FH7 – 7217 – 000		1	PHOTO – INTERRUPTER, TLP1215 フォトインタラプタ	CLC950 PS28 J272
41	FS5 – 6357 – 000		4	ROLLER, DELIVERY ハイシ ローラ	
42	FS1 – 1512 – 000		6	BUSHING ブッシング	CLC950
43	FA4 – 8486 – 030		1	ROLLER ケンチ コロ	
44	FS5 – 9218 – 000		2	SCREW,STEPPED,M3 ダンビス	CLC950
45	WT2 – 0495 – 000		7	CLAMP, CABLE ケーブル クランプ	CLC900/920
	WT2 – 0495 – 000		10	CLAMP, CABLE ケーブル クランプ	CLC950
46	FA2 – 8361 – 000		2	RETAINER キンテイ	
47	FS5 – 2635 – 000		1	SPRING, TORSION ネジリ バネ	
48	FS5 – 0726 – 000		1	GEAR, 18T 18T ギア	
49	FS5 – 0731 – 000		1	GEAR, 20T 20T ギア	CLC950
50	FS5 – 2597 – 000		1	SPRING, TORSION ネジリ バネ	
51	FS5 – 2598 – 000		1	SPRING, TORSION ネジリ バネ	CLC950
52	FS5 – 2599 – 000		1	SPRING, TENSION ヒッパリ バネ	
53	FS5 – 2600 – 000		1	SPRING, TENSION ヒッパリ バネ	CLC950
54	FS5 – 6156 – 000		4	ROLLER コロ	CLC950

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
370 – 55	FS5 – 9225 – 000		2	SCREW,STEPPED,M4X8.3 ダンビス	
56	FS5 – 9217 – 000		2	SCREW,STEPPED,M4 ダンビス	
57	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950 J271
58	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
59	WT2 – 5035 – 000		5	CLIP, CABLE エッジ サドル	CLC900/920
	WT2 – 5035 – 000		6	CLIP, CABLE エッジ サドル	CLC950
501	XB1 – 2300 – 409		AR	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
502	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	CLC900/920
503	XD2 – 1100 – 242		1	RING,E E リング	
504	XB1 – 2400 – 609		1	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	CLC900/920
	XB1 – 2400 – 609		8	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	CLC950
505	XB1 – 2401 – 209		1	SCREW,MACH.,TRUSS HEAD,M4X12 バインド ネジ	
506	XD2 – 1100 – 502		AR	RING,E E リング	
507	XB1 – 2300 – 609		3	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	CLC950
508	XD3 – 1300 – 102		1	PIN,SPRING スプリング ピン	CLC950

FIGURE 375 INNER DELIVERY ASSEMBLY
内排紙部



502
2
1
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504
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502
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501
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8
504
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21
504
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15
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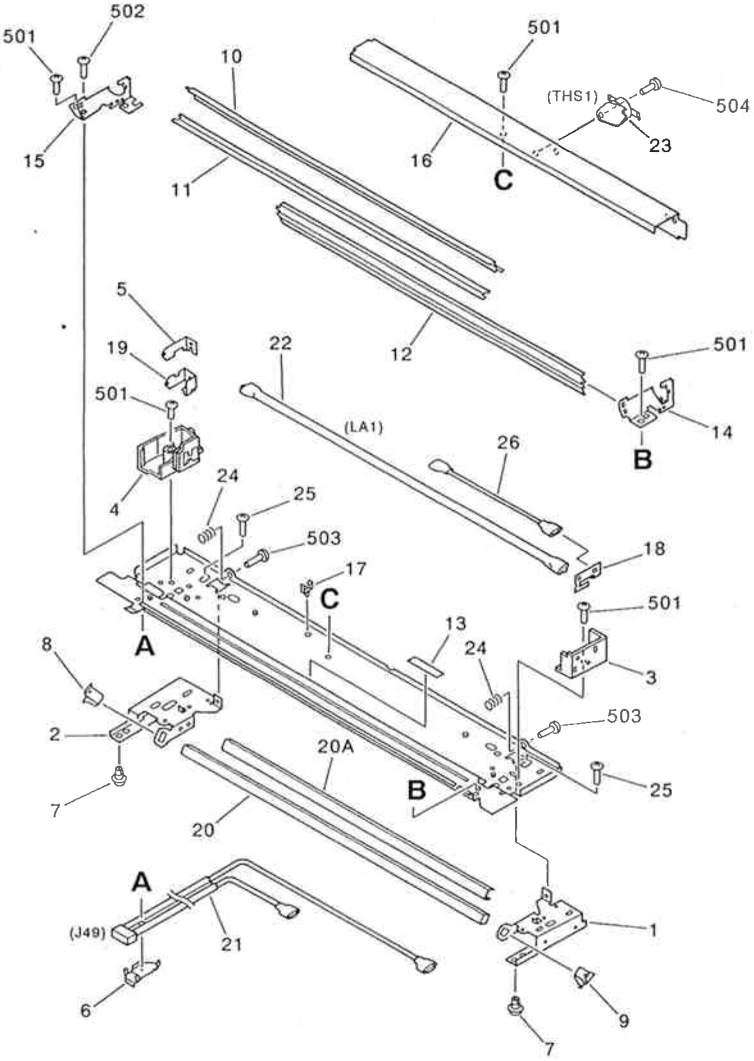
504
8
505
504
13
19
(J149)
(J157)
503
(PS11)
20
17
22
14
16
18
21
7
504

NOTE : This assembly is included in the assembly shown in Figure 810.

注 ： このユニットは、 Figure 810のユニットに含まれます。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
375 –	FG5 – 5606 – 050		1	INNER DELIVERY ASSEMBLY ウチ ハイシ ブ	SEE NOTE
1	FS5 – 6258 – 000		2	ROLLER コロ	
2	FB2 – 8727 – 000		2	HOLDER, ROLLER コロ ホルダ	
3	XA9 – 0679 – 000		2	SCREW,MACH.,FLAT HEAD,M3X4 ヒラコ ネジ	
4	WT2 – 5026 – 000		3	CLIP, CABLE クランプ	
5	FB2 – 1380 – 000		1	CATCH キャッチ	
6	FB2 – 8728 – 000		2	ELIMINATOR, STATIC CHARGE ジョデンシン	
7	FB2 – 1134 – 000		1	MOUNT, SENSOR センサ ダイ	
8	FS1 – 1512 – 000		2	BUSHING ブッシング	
9	FS5 – 0702 – 000		1	GEAR, 15T 15T ギア	
10	FB2 – 1133 – 000		1	ROLLER, DELIVERY ウチ ハイシ ローラ	
11	FB3 – 2051 – 000		4	CLAW, SEPARATION, LOWER シタ ブンリ ツメ	
12	FS6 – 2146 – 000		4	SPRING, TENSION ヒツパリ バネ	
13	FS5 – 2617 – 000		2	SPRING, TENSION ヒッパリ バネ	
14	FB2 – 1137 – 000		1	LEVER, SENSOR センサ レバー	
15	FB2 – 4455 – 020		2	PLATE, RETAINING CLAW ツメ オサエ	
16	FS6 – 2147 – 000		1	SPRING, TORSION ネジリ バネ	
17	WT2 – 5300 – 000		1	CLIP, CABLE エッジ サドル	
18	FB2 – 1138 – 000		1	CROSSMEMBER, DELIVERY ハイシ ステイ	
19	FG5 – 3126 – 000		1	SENSOR HARNESS センサ ハーネス	J149,157
20	FH7 – 7306 – 000		1	PHOTO – INTERRUPTER, S7G37 フォトインタラプタ	PS11 J157
21	FS5 – 9224 – 000		2	SCREW,STEPPED,M4 ダンビス	
22	WT2 – 5232 – 000		3	CLAMP, CABLE コード オサエ	
501	XD2 – 1100 – 502		1	RING,E E リング	
502	XB1 – 2300 – 609		4	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB1 – 2401 – 009		1	SCREW,MACH.,TRUSS HEAD,M4X10 バインド ネジ	
504	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
505	XD2 – 1100 – 642		AR	RING,E E リング	

FIGURE 420 MIRROR ASSEMBLY 1
第１ミラー台部

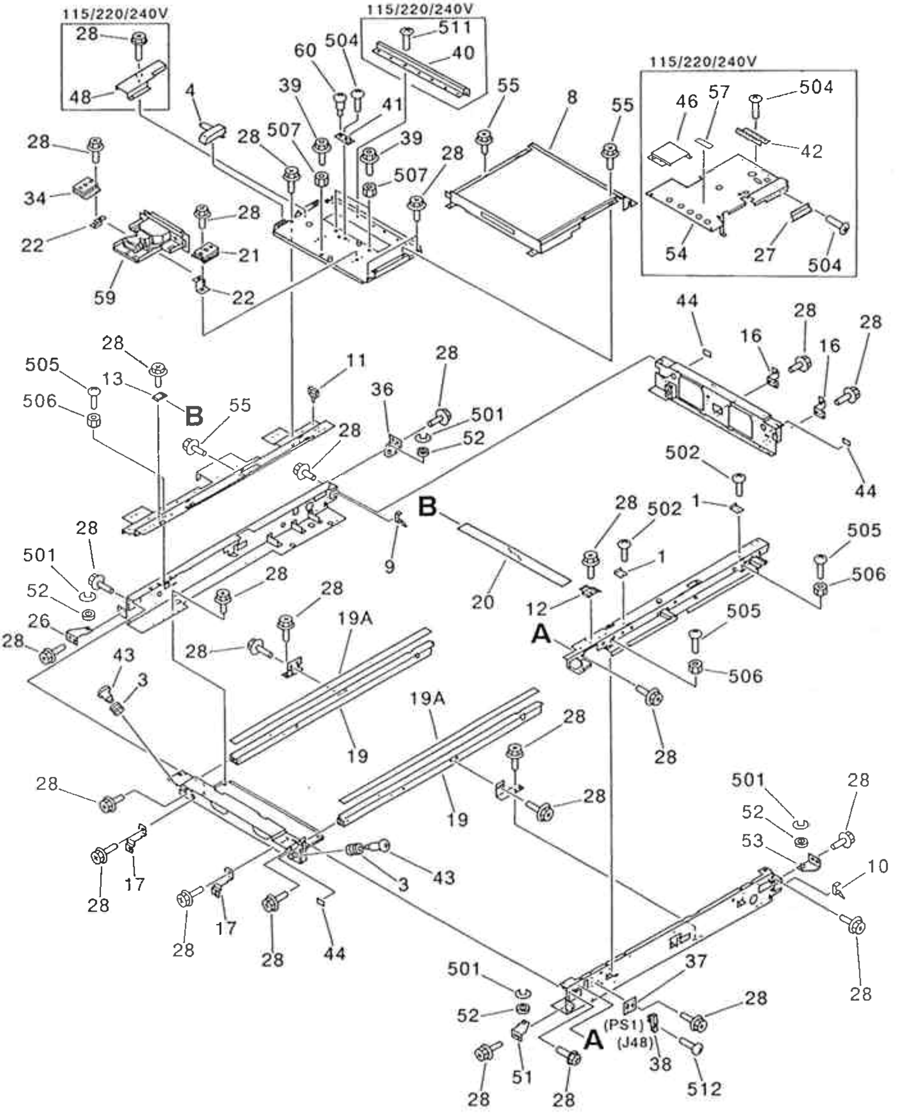


501
502
501
10
(THS1)
504
23
16
C
15
11
12
5
19
22
501
501
(LA1)
26
14
B
4
24
25
503
18
17
C
501
A
8
13
24
3
503
2
20A
25
7
B
20
A
(J49)
21
1
6
9
7

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
420 –	FG5 – 5648 – 040		1	MIRROR ASSEMBLY 1 ダイ 1 ミラー ダイ ブ	
1	FB1 – 6632 – 000		1	RETAINER, MIRROR, FRONT ミラー オサエ (マエ)	
2	FB1 – 6633 – 000		1	RETAINER, MIRROR, REAR ミラー オサエ (ウシロ)	
3	FB2 – 9064 – 000		1	TERMINAL, LAMP, FRONT ランプ ホルダ (マエ)	
4	FB2 – 9065 – 000		1	TERMINAL, LAMP, REAR ランプ ホルダ (ウシロ)	
5	FB1 – 6644 – 000		1	TERMINAL, REAR デンキョク (ウシロ)	
6	FB1 – 6645 – 000		1	HOLDER, CABLE コード オサエ	
7	FB1 – 6647 – 000		4	PIN, SLIDE スライド ピン	
8	FB1 – 6649 – 000		1	SPRING, LEAF イタ バネ	
9	FB1 – 6657 – 000		1	SPRING, LEAF イタ バネ	
10	FB2 – 0249 – 000		1	REFLECTOR, UPPER ハンシャ ガサ (ウエ)	
11	FB2 – 0250 – 000		1	REFLECTOR, LOWER ハンシャ ガサ (シタ)	
12	FB2 – 0251 – 000		1	REFLECTOR, AUXILIARY ホジョ ハンシャ ガサ	
13	FB2 – 6288 – 000		1	SHEET, DAMPER ボウシン シート	
14	FB2 – 0253 – 000		1	PLATE, REFLECTOR, FRONT ハンシャ ソクバン (マエ)	
15	FB2 – 0254 – 000		1	PLATE, REFLECTOR, REAR ハンシャ ソクバン (ウシロ)	
16	FB2 – 0255 – 000		1	PANEL, LIMIT キセイ バン	
17	WT2 – 0434 – 000		4	CLIP, CABLE ロッキング ワイヤ サドル	
18	FF5 – 1178 – 000		1	TERMINAL, FRONT デンキョク (マエ)	
19	FF5 – 1179 – 000		1	TERMINAL, REAR デンキョク (ウシロ)	
20	FF5 – 4044 – 000		1	MIRROR 1 ダイ 1 ミラー	
20A	FB2 – 9063 – 020		1	PLATE, MIRROR ミラー ボウシン バン	
21	FH2 – 6033 – 000		1	CORD, LAMP ランプ チュウケイ コード	J49
22	FH7 – 3264 – 000		1	LAMP, HALOGEN, 75V, 235W ハロゲン ランプ	LA1
23	FH7 – 6200 – 000		1	THERMOSTAT サーモスタット	THS1
24	FS5 – 2295 – 000		2	SPRING, COMPRESSION アッシュク バネ	
25	XA9 – 0253 – 000		4	SCREW,MACH.,PAN HEAD, M3X8 バインド ネジ	
26	FG5 – 1931 – 000		1	MIRROR CABLE 1 ダイ 1 ミラー ダイ ソクセン	
501	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2300 – 809		1	SCREW,MACH.,TRUSS HEAD,M3X8 バインド ネジ	

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
420 –	503	XB1 – 2301 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X16 バインド ネジ	
	504	XB1 – 2300 – 409		2	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	

FIGURE 430 READER ASSEMBLY (1/2)
リーダ部 (1/2)


115/220/240V
28
48
115/220/240V
511
40
504
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39
41
4
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507
39
507
28
28
34
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28
21
59
22
55
8
55
115/220/240V
504
46
57
42
54
27
504
44
28
16
16
28
28
505
13
B
506
11
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36
28
501
52
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44
502
1
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9
28
502
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505
20
506
28
501
52
26
28
28
12
19A
A
505
28
506
43
3
28
19
19A
28
28
28
28
19
501
28
52
53
10
17
3
43
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17
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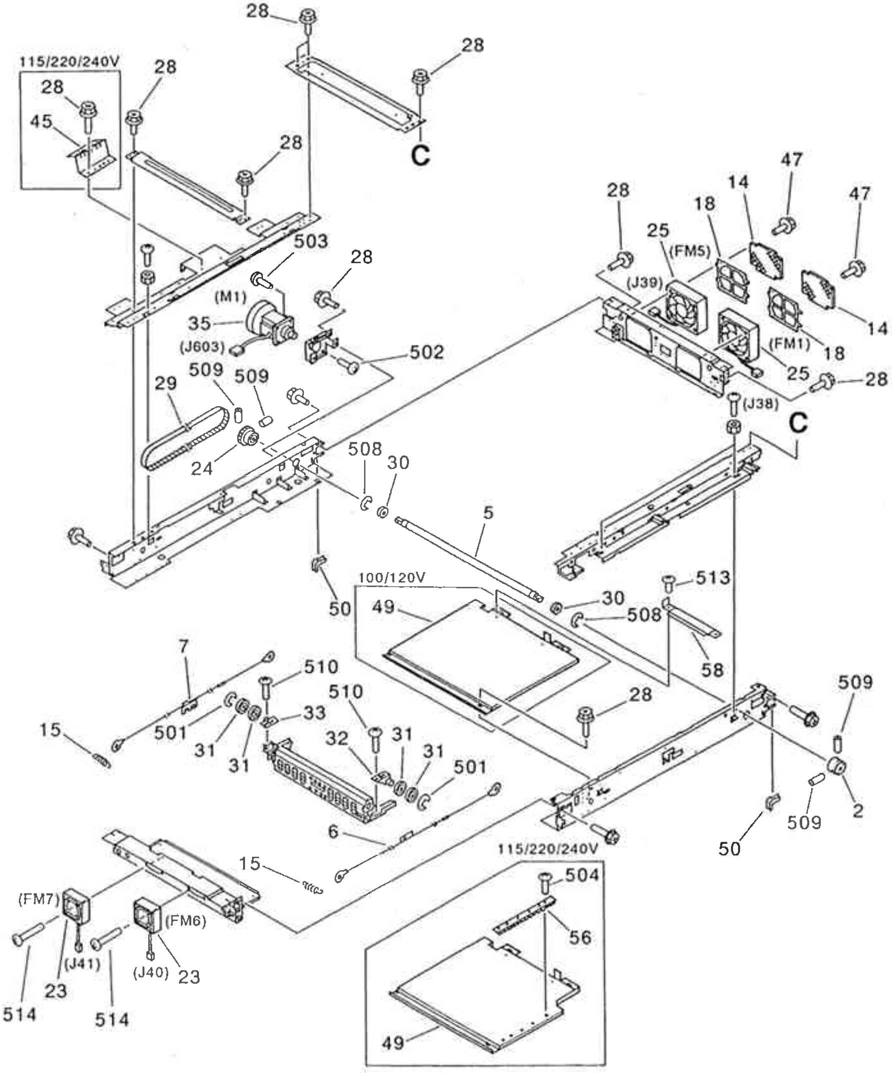
44
28
501
37
52
28
A
(PS1)
(J48)
38
512
28
51
28

FIGURE 430 READER ASSEMBLY ($^2/_2$)
リーダ部 ($^2/_2$)



28
28
115/220/240V
28
28
45
28
C
47
47
28
14
18
25
(FM5)
503
28
(J39)
(M1)
35
14
(J603)
502
18
(FM1)
25
28
509
509
29
(J38)
C
24
508
30
5
50
100/120V
49
513
30
508
58
7
510
510
33
15
501
31
31
32
31
31
501
28
509
2
509
6
50
15
115/220/240V
504
(FM7)
(FM6)
56
(J41)
(J40)
23
23
514
514
49

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
430 –	NPN		RF	READER ASSEMBLY リーダ ブ	
1	FA6 – 5642 – 000		2	RETAINER, GLASS ガラス オサエ イタ	
2	FB1 – 6677 – 030		1	PULLEY プーリ	
3	FB1 – 7112 – 000		2	ROLLER, WIRE ワイヤ コロ	
4	FB2 – 0177 – 000		1	HOLDER, CORD コード オサエ	
5	FB2 – 9057 – 000		1	SHAFT, DRIVE クドウ ジク	
6	FB2 – 0215 – 000		1	WIRE, SCANNER, FRONT コウガク ワイヤ (マエ)	
7	FB2 – 0216 – 000		1	WIRE, SCANNER, REAR コウガク ワイヤ (ウシロ)	
8	FB2 – 0245 – 050		1	COVER, READER リーダ カバー	100/120V
	FB3 – 1406 – 030		1	COVER, READER リーダ カバー	115/220/240V
9	WT2 – 5031 – 000		1	CLIP, CABLE エッジ サドル	
10	WT2 – 5086 – 000		1	HOLDER, EDGE エッジ ホルダ	
11	WT2 – 0494 – 000		10	CLAMP, CABLE ソクセン オサエ	
12	FB2 – 0240 – 000		1	RETAINER, GLASS, FRONT ガラス オサエ (マエ)	
13	FB2 – 0241 – 000		1	RETAINER, GLASS, REAR ガラス オサエ (ウシロ)	
14	FB2 – 0247 – 040		2	FILTER, AIR フィルタ	
15	FB2 – 0258 – 000		2	SPRING, TENSION ヒッパリ バネ	
16	FB2 – 0259 – 000		2	PLATE, SUPPORT, COVER, RIGHT カバー シジバン (ミギ)	
17	FB2 – 6268 – 000		2	PLATE, SUPPORT, COVER, LEFT カバー シジバン (ヒダリ)	
18	FB2 – 6280 – 020		2	PLATE, MOUNTING, FILTER フィルタ トリツケ バン	
19	FF5 – 2136 – 000		2	RAIL, SCANNER コウガク レール	
19A	FB2 – 0244 – 000		1	SHEET シート	
20	FF5 – 2137 – 000		1	REFLECTOR, WHITE ハクショク バン	
21	FG6 – 1086 – 000		1	WEIGHT, FRONT ウェイト (マエ)	
22	FB2 – 0176 – 000		2	MOUNT, LENS レンズ オサエ	
23	FH6 – 1023 – 000		2	FAN, DC 24V ファン	FM6,7 J40,41
24	FS5 – 3250 – 000		1	PULLEY, 66T 66T プーリ	
25	FH6 – 1026 – 000		2	FAN, DC24V ファン	FM1,5 J38,39
26	FF5 – 2134 – 000		1	MOUNT, PULLEY プーリ ダイ	
27	FB3 – 1410 – 000		1	PLATE, GROUNDING アース バン	115/220/240V

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
430 – 28	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
29	XF9 – 0381 – 000		1	BELT, TIMING タイミング ベルト	
30	XG9 – 0249 – 000		2	BEARING, BALL ボール ベアリング	
31	FB2 – 0243 – 000		4	PULLEY プーリ	
32	FF5 – 2145 – 000		1	MOUNT, PULLEY, FRONT プーリ ダイ（マエ）	
33	FF5 – 2146 – 000		1	MOUNT, PULLEY, REAR プーリ ダイ（ウシロ）	
34	FG5 – 9718 – 000		1	WEIGHT, REAR ウェイト（ウシロ）	
35	FH6 – 1006 – 000		1	MOTOR, DC 24V モータ	M1 J603
36	FF5 – 2135 – 000		1	MOUNT, PULLEY プーリ ダイ	
37	FB2 – 0225 – 000		1	PLATE, SENSOR センサ バン	
38	FH7 – 7306 – 000		1	PHOTO – INTERRUPTER, S7G37 フォトインタラプタ	PS1 J48
39	FC1 – 1150 – 000		3	BOLT,M4 ボルト	
40	FB3 – 0894 – 000		1	PLATE, GROUNDING アース バン	115/220/240V
41	FF5 – 2173 – 000		1	PLATE, POSITIONING イチ ギメ バン	
42	FB3 – 1141 – 000		1	PLATE, GROUNDING アース バン	115/220/240V
43	FS5 – 9219 – 000		2	SCREW,STEPPED,M4 ダンビス	
44	FB1 – 7114 – 000		4	DAMPER ダンパ	
45	FB3 – 1152 – 000		1	PLATE, GROUNDING, 2 アース バン (2)	115/220/240V
46	FB3 – 1150 – 000		1	COVER, SHIELD, UPPER ウエ シールド カバー	115/220/240V
47	XA9 – 0748 – 000		4	SCREW,RS,M4X10 RS タイト ネジ	
48	FB4 – 0510 – 020		1	PLATE, SHIELD シード バン	115/220/240V
49	FB4 – 0506 – 000		1	COVER, SCANNER スキャナ カバー	100/120V
	FB4 – 0507 – 020		1	COVER, SCANNER スキャナ カバー	115/220/240V
50	FB2 – 6333 – 000		2	GUIDE, EDGE エッジ サドル	
51	FF5 – 2132 – 000		1	MOUNT, PULLEY プーリ ダイ	
52	FB1 – 7109 – 000		4	PULLEY プーリ	
53	FF5 – 2133 – 000		1	MOUNT, PULLEY プーリ ダイ	
54	FB3 – 1140 – 030		1	COVER, CCD CCD カバー	115/220/240V
55	XA9 – 0721 – 000		AR	SCREW,RS,M4X10 RS タイト ネジ	
56	FB3 – 1136 – 000		1	PLATE, GROUNDING アース バン	115/220/240V

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
430 - 57	FB4 - 6248 - 000		1	GASKET ガスケット	115/220/240V
58	FB4 - 0505 - 000		1	COVER カバー	
59	FG5 - 9714 - 020		1	CCD ASSEMBLY CCD ブ	100/120V
	FG5 - 9715 - 020		1	CCD ASSEMBLY CCD ブ	115/220/240V
60	FS2 - 9267 - 000		1	SCREW, STEPPED, M4 ダンビス	
501	XD2 - 1100 - 642		AR	RING,E E リング	
502	XB1 - 2400 - 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XB1 - 2401 - 009		1	SCREW,MACH.,TRUSS HEAD,M4X10 バインド ネジ	
504	XB1 - 2300 - 606		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	115/220/240V
505	XB1 - 2301 - 009		AR	SCREW,MACH.,TRUSS HEAD,M3X10 バインド ネジ	
506	XB7 - 2100 - 309		AR	NUT,HEX,M3 ロッカク ナット	
507	XB7 - 2100 - 409		AR	NUT,HEX,M4 ロッカク ナット	
508	XD2 - 1200 - 802		AR	RING,E E リング	
509	XB6 - 2401 - 008		4	SETSCREW,M4X10 ロッカク アナツキ トメネジ	
510	XB1 - 2300 - 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
511	XB1 - 2300 - 607		7	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
512	XB1 - 2401 - 209		AR	SCREW,MACH.,TRUSS HEAD,M4X12 バインド ネジ	
513	XB1 - 2400 - 606		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
514	XB1 - 2303 - 009		4	SCREW,MACH.,TRUSS HEAD,M3X30 バインド ネジ	

FIGURE 500 PHOTO SENSITIVE DRUM ASSEMBLY (1/2)
感光ドラム部 (1/2)

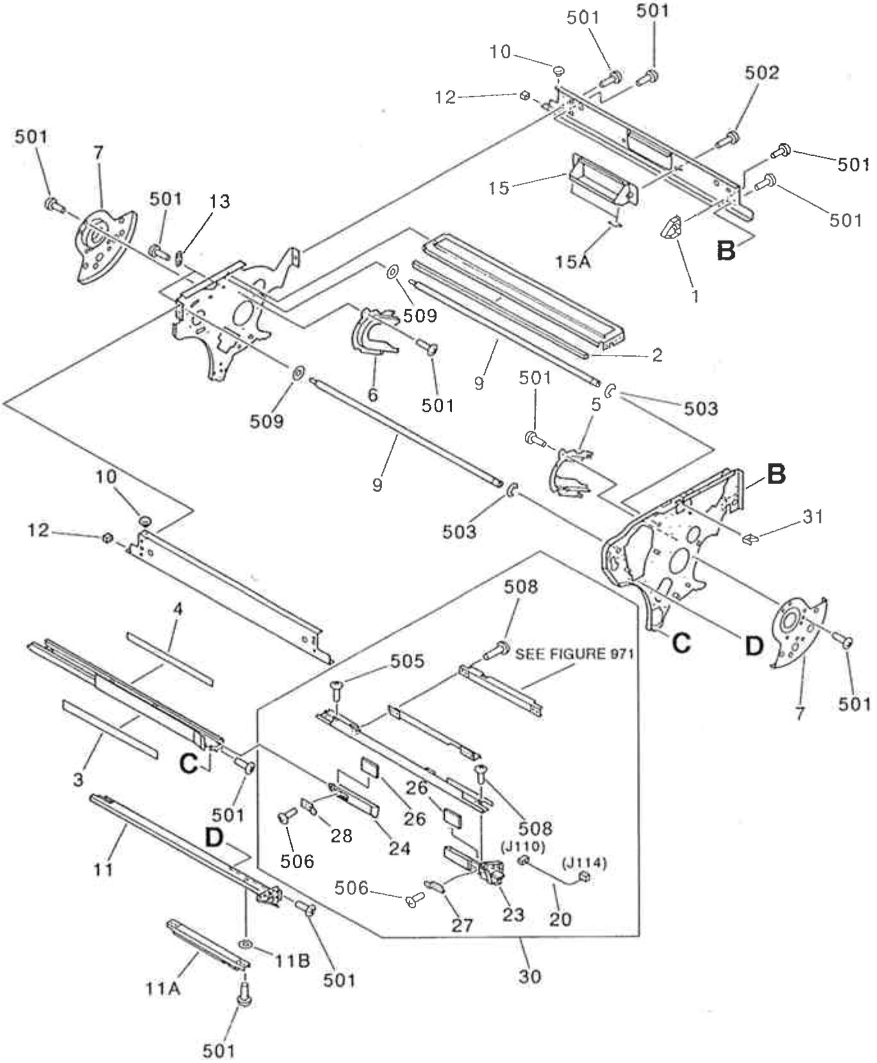

501
501
10
502
12
501
7
501
13
15
501
501
15A
B
1
509
2
9
6
501
509
501
5
503
9
B
10
31
12
503
508
4
SEE FIGURE 971
C
D
505
7
501
3
C
26
501
28
26
508
D
24
(J110)
(J114)
11
506
506
23
20
27
11B
501
11A
30
501

FIGURE 500 PHOTO SENSITIVE DRUM ASSEMBLY ($^2/_2$)
感光ドラム部 ($^2/_2$)

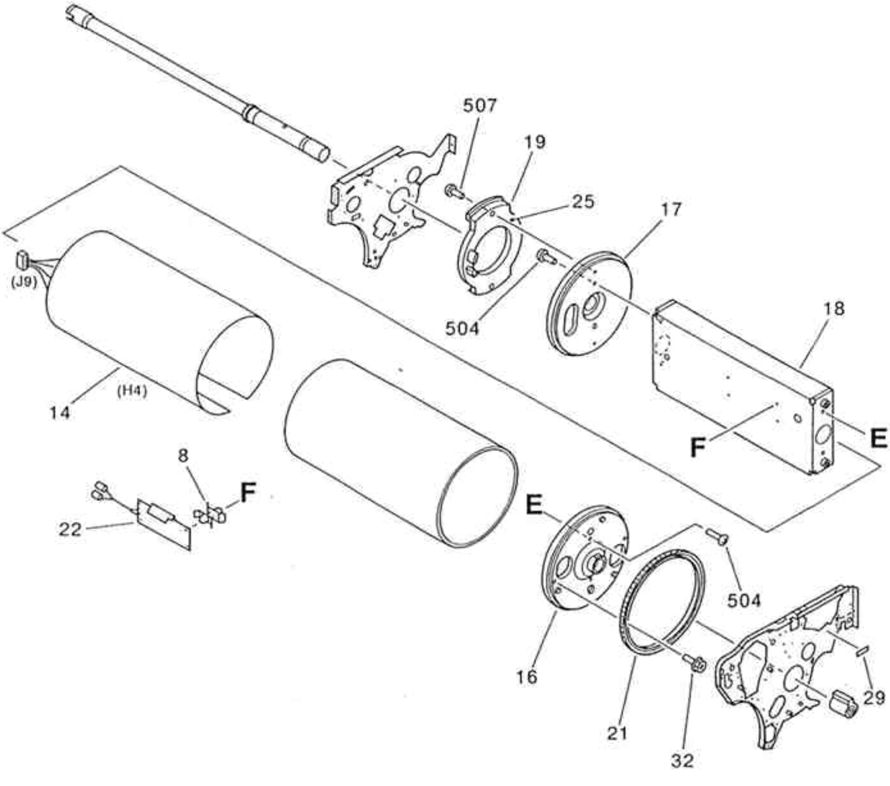
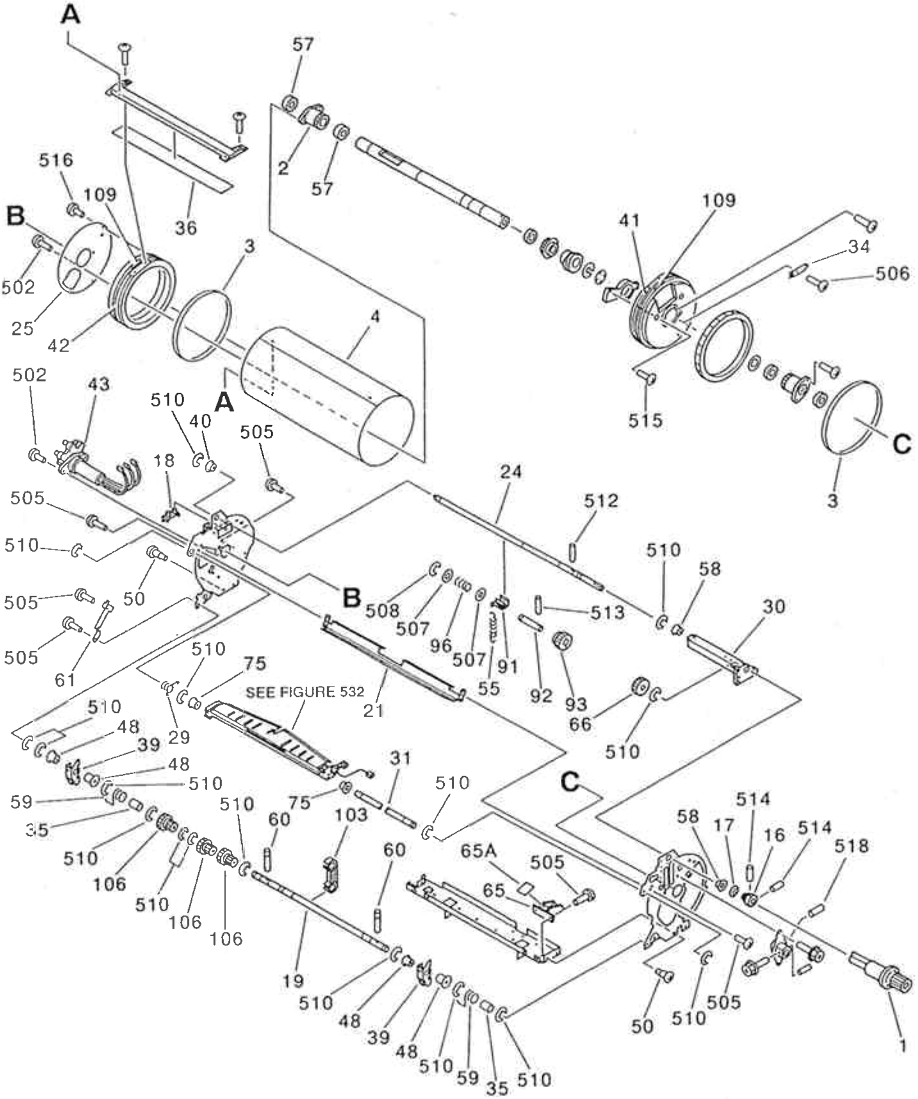

507
19
25
17
18
(J9)
504
14
(H4)
F
E
8
F
22
E
504
16
21
32
29

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
500 –	NPN		RF	PHOTO SENSITIVE DRUM ASSEMBLY カンコウ ドラム ブ	
1	FB2 – 0388 – 000		2	COVER, PROTECTIVE ホゴ カバー	
2	FB3 – 1415 – 000		1	SEAL, CROSSMEMBER ステイ シール	
3	FB3 – 2059 – 000		1	SHEET, TONER SHIELD, 2 ヨゴレ ボウシ シート (2)	
4	FB2 – 9123 – 000		1	SHEET, TONER SHIELD, 1 ヨゴレ ボウシ シート (1)	
5	FB2 – 0409 – 000		1	GUIDE, DRUM, FRONT ドラム ガイド (マエ)	
6	FB2 – 0410 – 000		1	GUIDE, DRUM, REAR ドラム ガイド (ウシロ)	
7	FB2 – 0411 – 000		2	BLOCK, PUSH – ON ツキアテ ブロック	
8	VT2 – 0001 – 004		4	SUPPORT, PCB ロッキング サポート	100V 220V PFW,PFX,PFZ,SBB SBC,SBD,TBC,TBD,TBE UDK,UDL,UDM 240V QBX,QBY,QBZ
9	FB2 – 8972 – 000		2	SHAFT, FIXED KIT キット コテイ ジク	
10	FB2 – 0485 – 000		4	PIN, SLIDE, 2 スライド ピン (2)	
11	FG5 – 5980 – 070		1	PLATE, SHEET シート バン	
11A	FG5 – 5967 – 040		1	CLEANING PROTECT UNIT クリーナ プロテクティング ユニット	
11B	FB3 – 6020 – 000		2	SHEET シート	
12	FB2 – 0415 – 000		2	BLOCK, SLIDE ブロック スライド	
13	FB2 – 0399 – 000		2	SPACER スペーサ	
14	FH7 – 4458 – 000		1	HEATER ヒータ	100V H4 J9
	FH7 – 4460 – 000		1	HEATER ヒータ	220V PFW,PFX,PFZ,SBB SBC,SBD,TBC,TBD,TBE UDK,UDL,UDM 240V QBX,QBY,QBZ H4 J9
15	FF5 – 2250 – 000		1	HANDLE, KIT キット トッテ	
15A	FB2 – 0389 – 000		2	RUBBER, PROTECTIVE ホゴ ゴム	
16	FB2 – 0342 – 000		1	FLANGE, FRONT フランジ (マエ)	
17	FB2 – 0343 – 000		1	FLANGE, REAR フランジ (ウシロ)	
18	FB2 – 0344 – 000		1	CROSSMEMBER DRUM ドラム ステイ	
19	FB2 – 8949 – 020		1	RING, SLIP スリップ リング	
20	FG5 – 3131 – 000		1	CABLE, BLACK TONER SENSOR クロ トナー ノウド ケンチ ソクセン	J110,114
21	FS5 – 0651 – 000		1	GEAR, 300T 300T ギア	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
500 − 22	FH6 − 3443 − 000		1	DRUM CONTROL PCB ドラム コントローラ カイロ キバン	100V
	FH6 − 3413 − 000		1	DRUM CONTROL PCB ドラム コントローラ カイロ キバン	220V PFW,PFX,PFZ,SBB SBC,SBD,TBC,TBD,TBE UDK,UDL,UDM 240V QBX,QBY,QBZ
23	FB2 − 0418 − 000		1	BLOCK, FRONT ブロック (マエ)	
24	FB2 − 0419 − 000		1	BLOCK, REAR ブロック (ウシロ)	
25	FB2 − 8950 − 000		1	SHEET, COVER カバー シート	
26	FB2 − 0421 − 000		2	BLADE, 2 ダイ 2 ブレード	
27	FB2 − 8974 − 000		1	RETAINER, BLADE, 2 FRONT, 1 ダイ 2 ブレード オサエ バン (マエ 1)	
28	FB2 − 8976 − 000		1	RETAINER, BLADE, 2 REAR, 1 ダイ 2 ブレード オサエ バン (ウシロ 1)	
29	FC2 − 3083 − 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	KOREAN
	ME1 − 0038 − 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	EXCEPT KOREAN
30	FG5 − 5633 − 040		1	BLADE ASSEMBLY 2 ダイ 2 ブレード ブ	
31	WT2 − 5011 − 000		1	CLIP, CABLE エッジ サドル	
32	XA9 − 0630 − 000		2	SCREW,RS,M4X10 RS タイト ネジ	
501	XB1 − 2400 − 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XB4 − 7400 − 809		4	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	
503	XD2 − 1100 − 502		2	RING,E E リング	
504	XB1 − 2401 − 209		8	SCREW,MACH.,TRUSS HEAD,M4X12 バインド ネジ	
505	XB1 − 2300 − 609		6	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
506	XB4 − 7300 − 609		2	SCREW,TAPPING,TRUSS HEAD,M3X6 バインド タッピン ネジ	
507	XB1 − 2401 − 009		2	SCREW,MACH.,TRUSS HEAD,M4X10 バインド ネジ	
508	XB1 − 2300 − 409		AR	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
509	XD1 − 2100 − 405		2	WASHER,PLAIN ヒラ ザガネ	

FIGURE 530 TRANSFER DRUM ASSEMBLY (1/3)
転写ドラム部 (1/3)


A
57
516
109
2
57
B
36
502
3
25
42
4
109
41
34
506
515
C
3
502
43
510
40
A
505
18
505
510
50
505
505
61
24
512
510
58
B
508
507
96
507
91
55
513
92
93
30
66
510
510
75
29
SEE FIGURE 532
21
510
48
39
48
510
59
35
510
106
510
106
106
510
60
75
31
103
510
60
19
510
48
39
48
510
59
35
510
C
65A
505
65
58
17
514
16
514
518
50
510
505
1

NOTE : This assembly does not include the part shown with key No. 1.

注 ： このユニットに、 Key No. 1の部品は含まれません。

FIGURE 530 TRANSFER DRUM ASSEMBLY ($^2/_3$)

転写ドラム部 ($^2/_3$)

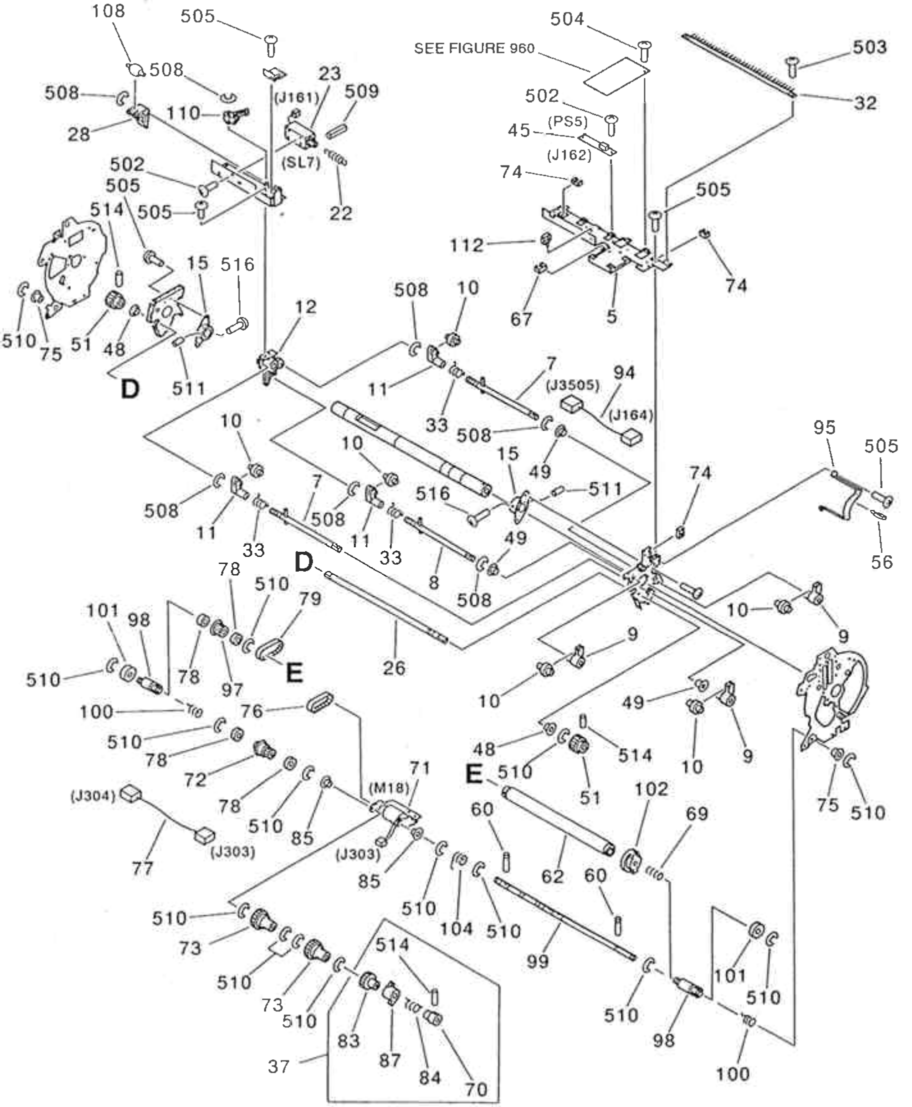

108
505
504
503
SEE FIGURE 960
508
23
508
(J161)
509
502
32
28
110
(PS5)
45
(SL7)
(J162)
502
74
505
22
505
505
514
112
15
516
74
508
10
67
5
12
510
75
51
48
D
511
7
11
(J3505)
94
10
(J164)
33
508
95
505
10
15
49
508
7
511
74
516
508
11
11
49
33
56
33
D
8
78
510
508
79
101
98
10
9
9
510
78
26
E
97
9
10
100
76
49
510
514
48
78
71
E
510
10
9
72
(M18)
51
102
(J304)
78
60
510
85
69
75
510
(J303)
(J303)
62
60
77
85
510
104
510
73
514
99
101
510
73
510
83
87
84
70
37
98
100

FIGURE 530 TRANSFER DRUM ASSEMBLY (3/3)
転写ドラム部 (3/3)

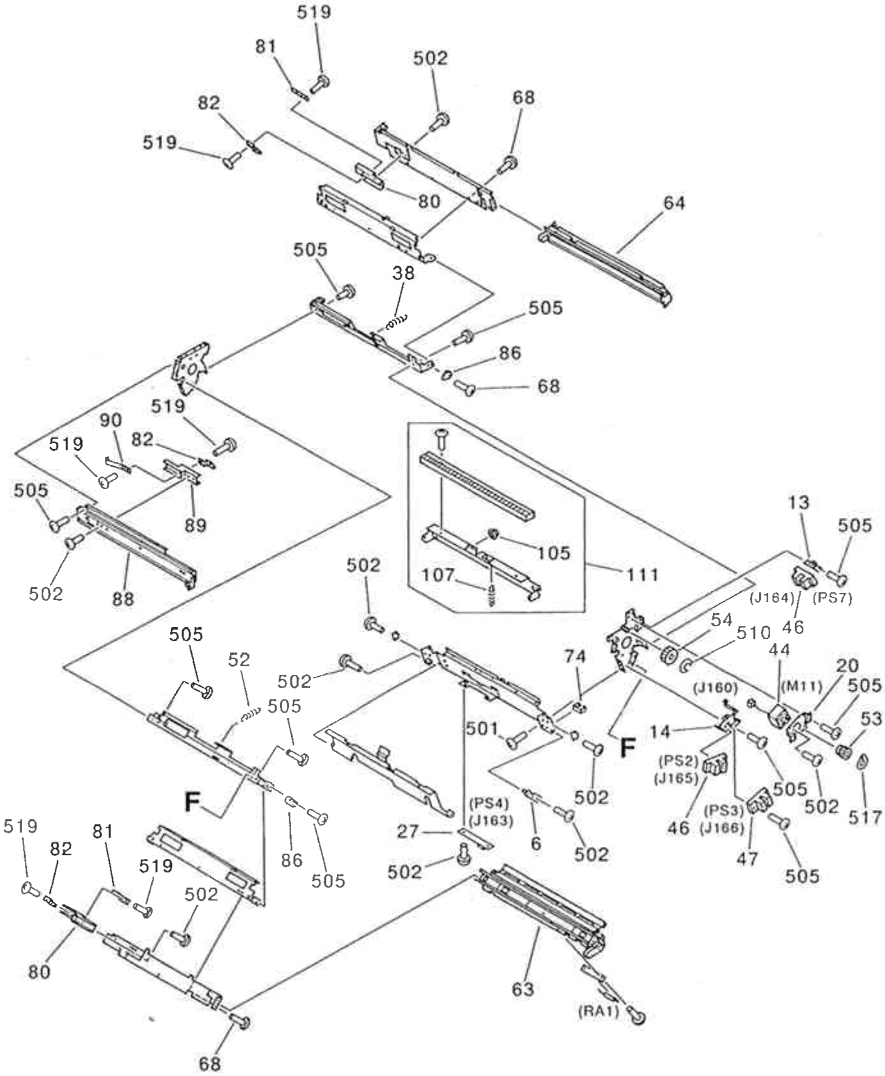

519
81
502
68
82
519
80
64
505
38
505
86
68
519
90
82
519
505
89
502
88
105
107
111
13
505
(J164)
(PS7)
46
502
505
52
505
502
54
510
46
44
74
20
(J160)
(M11)
505
53
501
14
F
502
F
(PS2)
(J165)
505
502
517
(PS4)
(J163)
(PS3)
(J166)
46
519
81
86
27
6
502
47
505
82
519
505
502
502
502
80
63
(RA1)
80
68

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
530 –	FG5 – 5831 – 280		1	TRANSFER DRUM ASSEMBLY テンシャ ドラム ブ	
1	FB2 – 0571 – 000		1	GRIP グリップ	SEE NOTE
2	FA5 – 9011 – 000		1	HOLDER, BEARING, REAR ベアリング ホルダ (ウシロ)	
3	FB2 – 0524 – 020		2	RING, POSITIONING イチギメ リング	
4	FB2 – 0525 – 020		1	SHEET, TRANSFER テンシャ シート	
5	FB2 – 0527 – 000		1	CROSSMEMBER, TRANSFER DRIVE テンシャ ドライバ ステイ	
6	FF5 – 2089 – 000		1	SUPPORT, SHAFT ジク シバン	
7	FF5 – 4051 – 000		2	SHAFT, PRESSURE テンシャ カアツ ジク	
8	FF5 – 4052 – 000		1	SHAFT, PRESSURE キュウチャク カアツ ジク	
9	FB2 – 0531 – 000		3	LEVER, PRESSURE ブラシ カアツ レバー	
10	FB2 – 0532 – 000		6	ROLLER, PRESSURE カアツ コロ	
11	FB2 – 0533 – 000		3	ARM, PRESSURE ブラシ カアツ アーム	
12	FB2 – 0534 – 000		1	SUPPORT, SHAFT ホジョ ソクバン	
13	FB2 – 0536 – 000		1	MOUNT, H.P. SENSOR H.P. センサ ダイ	
14	FB2 – 0537 – 000		1	MOUNT, SENSOR センサ ダイ	
15	FB2 – 0538 – 000		2	HOLDER, SHAFT ジク トメイタ	
16	FB2 – 0539 – 000		1	STOP, THRUST スラスト ストッパ	
17	FB2 – 0540 – 000		1	SPACER スペーサ	
18	FF5 – 4050 – 000		1	GRIP グリップ	
19	FB2 – 0543 – 000		1	SHAFT, PRESSURE LEVER カアツ レバー ジク	
20	FB2 – 0546 – 000		1	PLATE, MOTOR モータ ダイ	
21	FB2 – 0547 – 020		1	CROSSMEMBER, TRANSFER テンシャ ステイ	
22	FS5 – 2567 – 020		1	SPRING, TENSION ヒッパリ バネ	
23	FH7 – 5345 – 000		1	SOLENOID, DC24V DC ソレノイド	SL7 J161
24	FB2 – 0556 – 000		1	SHAFT, TRANSFER テンシャ ヨウドウ ジク	
25	FB2 – 0557 – 000		1	FLANGE, REAR ウシロ フランジ	
26	FB2 – 0560 – 000		1	SHAFT, GEAR ギア ジク	
27	FH7 – 7307 – 020		1	PHOTO – SENSOR フォト センサ	PS4 J163
28	FB2 – 0614 – 000		1	ARM, PUSH – UP ROLLER オシアゲ ローラ アーム	
29	FB2 – 0567 – 000		1	SPRING, TORSION ネジリ バネ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
530 – 30	FB2 – 0570 – 000		1	PLATE, SUPPORT, FRONT ホキョウ バン (マエ)	
31	FB2 – 0572 – 000		1	SHAFT, SEPARATION CLAW ブンリ ツメ ジク	
32	FB2 – 0573 – 000		1	ELIMINATOR, STATIC CHARGE ジョデンキ	
33	FB2 – 0576 – 000		3	SPRING, TORSION ネジリ バネ	
34	FC1 – 1117 – 000		1	ELIMINATOR, STATIC CHARGE ジョデン キ	
35	XZ9 – 0101 – 000		2	COLLAR カラー	
36	FB2 – 0586 – 000		1	SHEET, INSULATING ゼツエン シート	
37	FG5 – 7346 – 000		1	ROLLER ENGAGEMENT CLUTCH ASS'Y ローラ ケンマ クラッチ ブ	
38	FS5 – 2606 – 000		1	SPRING, TENSION ヒッパリ バネ	
39	FF5 – 2068 – 000		2	LEVER, PRESSURE カアツ レバー	
40	FS5 – 1505 – 000		1	BEARING, BALL ボール ベアリング	
41	FB2 – 0569 – 000		1	TAPE リング テープ	
42	FB2 – 0569 – 000		1	TAPE リング テープ	
43	FH2 – 9069 – 060		1	CABLE, HVT コウアツ ケーブル	
44	FH6 – 1020 – 000		1	MOTOR, DC 24V モータ	M11 J160
45	FH7 – 7307 – 020		1	PHOTO – SENSOR フォト センサ	PS5 J162
46	FH7 – 7217 – 000		2	PHOTO – INTERRUPTER, TLP1215 フォトインタラプタ	PS2,7 J164,165
47	FH7 – 7313 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS3 J166
48	FS1 – 1509 – 000		6	BUSHING ブッシング	
49	FS1 – 1569 – 000		3	BUSHING ブッシング	
50	FS2 – 9267 – 000		4	SCREW, STEPPED, M4 ダンビス	
51	FS3 – 0702 – 000		2	GEAR, 18T 18T ギア	
52	FS5 – 2565 – 020		1	SPRING, TENSION ヒッパリ バネ	
53	FS5 – 0682 – 000		1	GEAR, 14T 14T ギア	
54	FS5 – 0728 – 000		1	GEAR, 40T 40T ギア	
55	FS5 – 2590 – 000		1	SPRING, TENSION ヒッパリ バネ	
56	WT2 – 0387 – 000		11	CLAMP クランプ	
57	XG9 – 0223 – 000		2	BEARING ベアリング	
58	XG9 – 0250 – 000		2	BEARING, BALL ボール ベアリング	
59	FB2 – 0581 – 000		2	SPRING, TORSION ネジリ バネ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
530 – 60	FB2 – 0582 – 000		5	PIN カアツ ピン	
61	FB2 – 0583 – 000		1	SUPPORT, SPRING バネ カケ イタ	
62	FB2 – 9192 – 000		1	ROLLER ローラ	
63	FG5 – 8531 – 000		1	ATTRACTION CHARGER ASSEMBLY キュウチャク タイデン ブ	
64	FG5 – 5842 – 080		1	TRANSFER CHARGER ASSEMBLY テンシャ タイデン ブ	
65	FF5 – 2070 – 000		2	SCRAPER スクレーパ	
65A	FB2 – 0559 – 000		1	SCRAPER スクレーパ	
66	FS5 – 0738 – 000		1	GEAR, 23T 23T ギア	
67	WT2 – 5011 – 000		1	CLIP, CABLE エッジ サドル	
68	XA9 – 0769 – 000		6	SCREW, M4X6 ネジ	
69	FS5 – 2628 – 000		1	SPRING, COMPRESSION アッシュク バネ	
70	FA2 – 5606 – 000		1	DRUM, CLUTCH DRIVEN バネウケ カナグ	
71	FG5 – 8299 – 000		1	MOTOR ASSEMBLY DC24V モータ	M18 J303
72	FS5 – 3264 – 000		1	GEAR, 18T/PULLEY, 28T/42T 18T ギア /28T/42T プーリ	
73	FS5 – 0984 – 000		2	GEAR, 18T/32T 18T/32T ギア	
74	WT2 – 5056 – 000		10	CLIP, CABLE エッジ サドル	
75	FS1 – 1462 – 000		4	BUSHING ブッシング	
76	XF9 – 0430 – 000		1	BELT, TIMING, FLAT タイミング ベルト	
77	FG5 – 3121 – 000		1	CABLE, ROLLER チュウケイ ソクセン	J303,304
78	XG9 – 0211 – 000		4	BALL BEARING, MF128ZZ1MC3D4M ボール ベアリング	
79	XF9 – 0358 – 000		1	BELT, TIMING タイミング ベルト	
80	FA5 – 9006 – 000		2	PLATE, CONNECTING コネクタ	
81	FA5 – 9055 – 000		2	SPRING, LEAF イタ バネ	
82	FA5 – 9056 – 000		3	TERMINAL タンシ	
83	FS3 – 0007 – 020		1	GEAR, 32T 32T ギア	
84	FS1 – 2651 – 000		1	SPRING, TORSION ネジリ バネ	
85	FS1 – 1462 – 000		2	BUSHING ブッシング	
86	FF5 – 2081 – 000		2	SUPPORT, SHAFT ジク シバン	
87	FB2 – 1352 – 050		1	RING, CONTROL, PRESSURE カアツ セイギョ カン	
88	FF5 – 2331 – 000		1	PLATE, RAIL レール イタ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
530 – 89	FB2 – 0577 – 000		1	MOUNT, CONNECTOR コウアツ コネクタ ダイ	
90	FB2 – 0578 – 000		1	SPRING, LEAF イタ バネ	
91	FB2 – 0579 – 000		1	HOLDER, HANDLE ハンドル ホルダ	
92	FB2 – 0580 – 000		1	SHAFT, IDLER アイドラ ジク	
93	FS5 – 0737 – 000		1	GEAR, 23T 23T ギア	
94	FG5 – 3180 – 000		1	CABLE, HP ブラシ HP ソクセン	J164,3505
95	FB2 – 0585 – 000		1	CABLE, GUIDE ソクセン ガイド	
96	FS5 – 2618 – 000		1	SPRING, COMPRESSION アッシュク バネ	
97	FS5 – 3265 – 000		1	PULLEY, 28T 28T プーリ	
98	FB2 – 0588 – 000		2	ARM, ROLLER ローラ アーム	
99	FB2 – 0590 – 000		1	SHAFT ヨウドウ ジク	
100	FB2 – 0591 – 000		2	SPRING, TORSION ネジリ バネ	
101	FB2 – 0592 – 000		2	ROLLER コロ	
102	FB2 – 0593 – 000		1	BEARING ジクウケ	
103	FB2 – 0594 – 000		1	SUPPORT, SHAFT ジク オサエ バン	
104	FB2 – 0595 – 000		1	SPRING, TORSION ネジリ バネ	
105	FB1 – 6647 – 000		1	PIN, SLIDE スライド ピン	
106	FS5 – 0984 – 000		3	GEAR, 18T/32T 18T/32T ギア	
107	FS5 – 2626 – 000		1	SPRING,TENSION ヒッパリ バネ	
108	FB2 – 0631 – 020		1	COLLAR, PUSH – UP オシアゲ コロ	
109	FB2 – 0584 – 020		2	SPACER, ROLLER テンシャ リング	
110	FB2 – 0613 – 000		1	LEVER, PUSH – UP オシアゲ レバー	
111	FG5 – 2642 – 000		1	INNER BRUSH ASSEMBLY ウチ ブラシ ユニット	
112	WT2 – 5222 – 000		12	HOLD, CABLE ケーブル オサエ	
501	XB1 – 2300 – 409		AR	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
502	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB1 – 2300 – 406		2	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
504	XB1 – 2400 – 608		4	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
505	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
506	XB1 – 2300 – 606		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	

FIGURE & KEY NO.		PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
530 –	507	XD1 – 1106 – 225		2	SHIM ヒョウジュン ワッシャ	
	508	XD2 – 1100 – 502		AR	RING,E E リング	
	509	XD3 – 1300 – 322		1	PIN,SPRING スプリング ピン	
	510	XD2 – 1100 – 642		AR	RING,E E リング	
	511	XB6 – 2500 – 808		2	SETSCREW,M5X8 ロッカク アナツキ トメネジ	
	512	XD3 – 2200 – 122		1	PIN,DOWEL ヘイコウ ピン	
	513	XD3 – 2200 – 102		AR	PIN,DOWEL ヘイコウ ピン	
	514	XB6 – 2400 – 408		6	SETSCREW,M4X4 ロッカク アナツキ トメネジ	
	515	XB1 – 2401 – 009		3	SCREW,MACH.,TRUSS HEAD,M4X10 バインド ネジ	
	516	XB1 – 2400 – 809		AR	SCREW,MACH.,TRUSS HEAD,M4X8 バインド ネジ	
	517	XD2 – 2100 – 502		AR	RING,GRIP グリップ リング	
	518	XB6 – 2500 – 508		AR	SETSCREW,M5X5 ロッカク アナツキ トメネジ	
	519	XB1 – 2300 – 402		AR	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	

FIGURE 532 SEPARATION CLAW ASSEMBLY
分離爪部

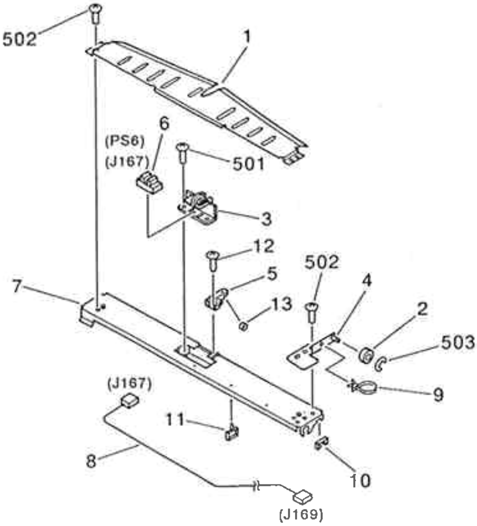
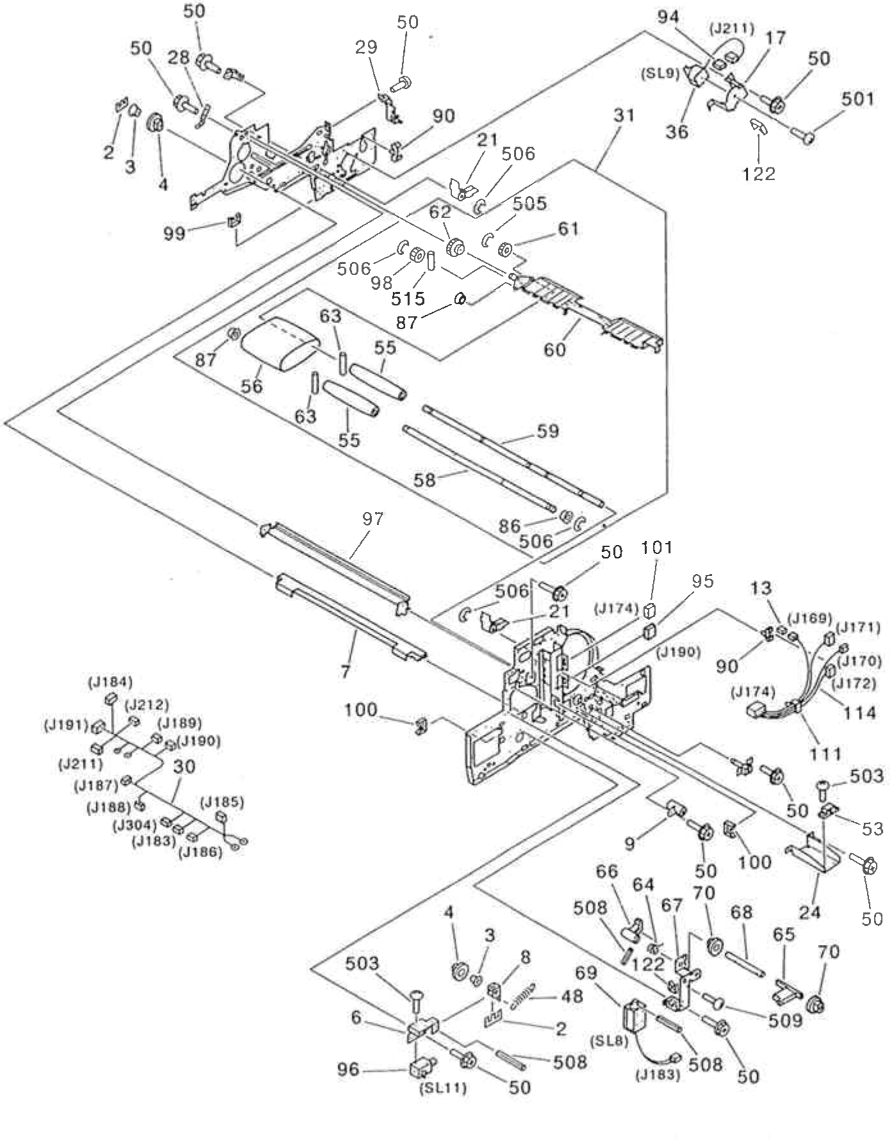

502
1
6
(PS6)
(J167)
501
3
12
502
5
7
4
13
2
503
9
(J167)
11
8
10
(J169)

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
532 –	FG5 – 2628 – 020		1	SEPARATION CLAW ASSEMBLY ブンリ ツメ ブ	
1	FB2 – 0645 – 020		1	PLATE, SEPARATION CLAW, UPPER ブンリ ヅメ バン (ウエ)	
2	FC1 – 1120 – 000		1	COLLAR コロ	
3	FF2 – 2842 – 070		1	ARM, SENSOR センサ アーム	
4	FF5 – 2090 – 000		1	SUPPORT, ROLLER コロ シバン	
5	FB2 – 0648 – 000		1	CLAW, SEPARATION ブンリ ヅメ	
6	FH7 – 7217 – 000		1	PHOTO – INTERRUPTER, TLP1215 フォトインタラプタ	PS6 J167
7	FB2 – 0644 – 020		1	PLATE, SEPARATION CLAW, LOWER ブンリ ツメ バン (シタ)	
8	FG5 – 3136 – 000		1	CABLE, SEPARATION SENSOR ブンリ センサ ソクセン	J167,169
9	WT2 – 5041 – 000		1	TIE, CABLE ソクセン バンド	
10	WT2 – 5300 – 000		1	CLIP, CABLE エッジ サドル	
11	WT2 – 5222 – 000		4	HOLD, CABLE ケーブル オサエ	
12	FA9 – 1449 – 000		1	CAPTIVE SCREW M3X6 ビス	
13	FB2 – 0649 – 000		1	ROLLER コロ	
501	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 609		4	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XD2 – 1100 – 322		1	RING,E E リング	

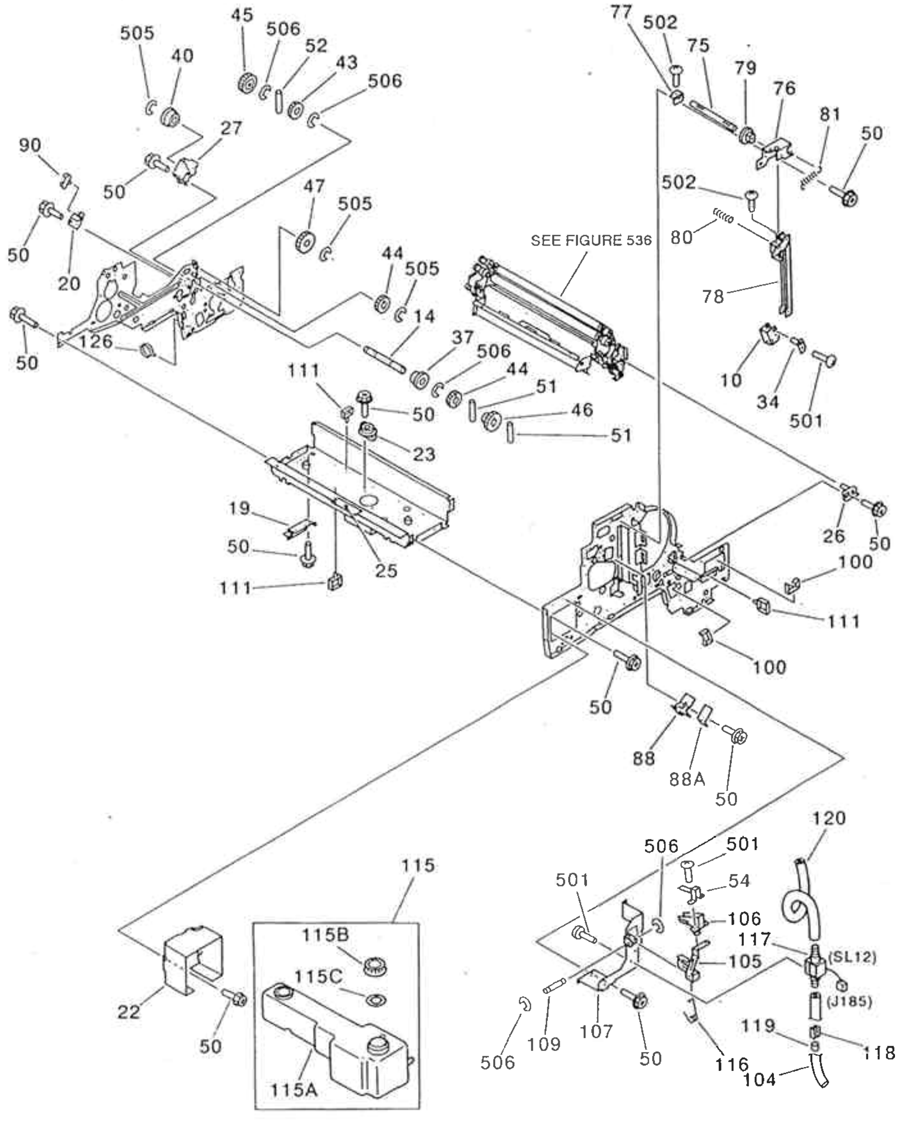
FIGURE 535 TRANSFER FRAME ASSEMBLY (1/3)
転写枠部 (1/3)



50
50
28
50
29
2
3
4
90
99
94
(J211)
17
50
(SL9)
501
36
122
31
21
506
62
505
61
506
98
515
87
63
55
87
56
60
63
55
59
58
86
506
97
50
101
95
506
21
(J174)
13
(J169)
(J171)
(J190)
90
(J170)
(J172)
(J174)
114
111
7
100
(J184)
(J212)
(J191)
(J189)
(J190)
(J211)
30
(J187)
(J188)
(J185)
(J304)
(J183)
(J186)
503
50
53
9
50
100
24
50
66
64
508
67
70
68
122
65
70
4
3
8
503
69
48
509
6
2
(SL8)
508
50
96
(SL11)
50
508
(J183)

FIGURE 535

TRANSFER FRAME ASSEMBLY ($^2/_3$)
転写枠部 ($^2/_3$)



505
45
506
52
43
506
40
27
90
50
50
47
505
50
20
44
505
14
126
50
37
506
44
51
111
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46
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23
19
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25
111
77
502
75
79
76
81
50
502
80
SEE FIGURE 536
78
10
34
501
26
50
100
111
100
50
88
88A
50
120
506
501
501
54
106
117
105
(SL12)
(J185)
119
118
116
104
506
109
107
50
115
115B
115C
115A
22
50

FIGURE 535 TRANSFER FRAME ASSEMBLY (3/3)
転写枠部 (3/3)

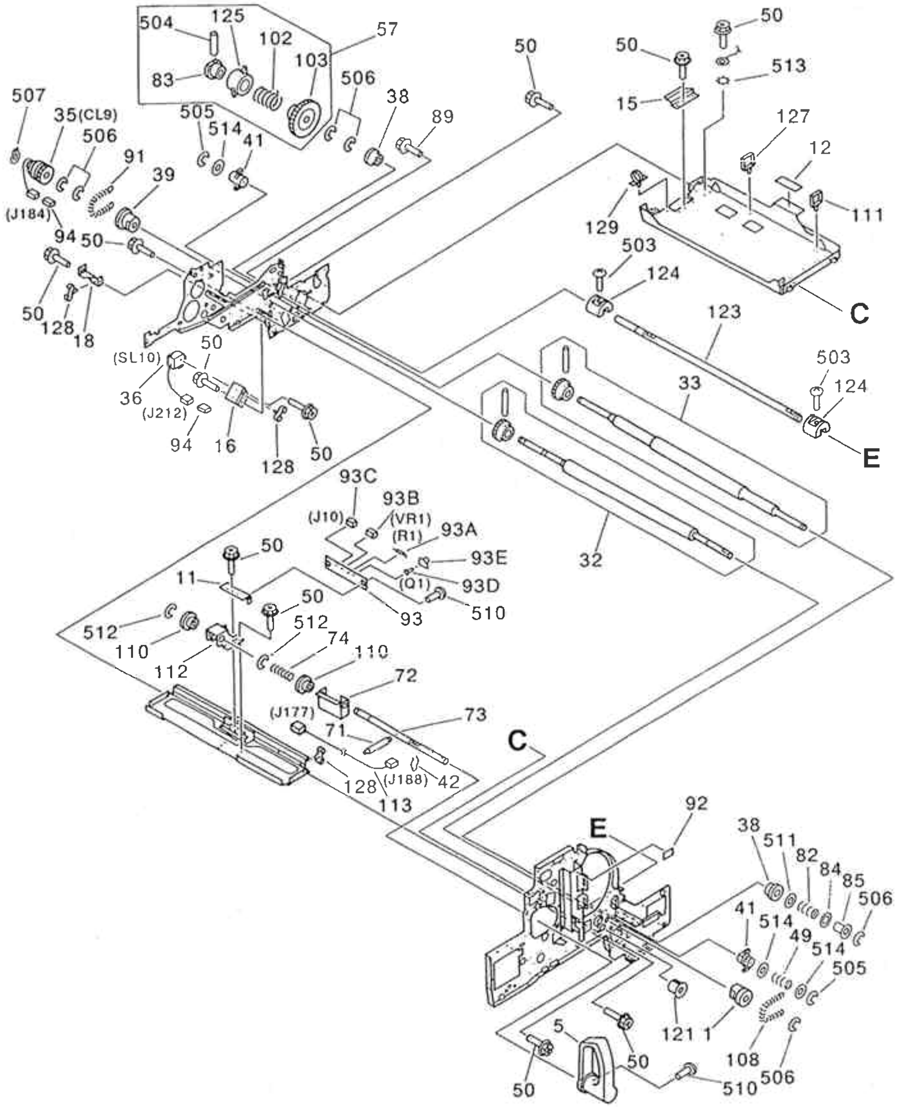

504
125
102
103
57
83
506
505
514
41
38
89
50
507
35(CL9)
506
91
39
(J184)
94
50
50
128
18
50
513
15
127
12
111
129
503
124
C
123
503
124
E
33
32
(SL10)
50
36
(J212)
94
16
128
50
93C
(J10)
93B
(VR1)
(R1)
93A
93E
93D
(Q1)
93
510
50
11
50
512
110
512
74
110
112
72
(J177)
73
71
C
128
(J188)
42
113
92
E
38
511
82
84
85
506
41
514
49
514
505
121
1
108
506
5
50
50
510

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
535 –	NPN		RF	TRANSFER FRAME ASSEMBLY テンシャ ワク ブ	
1	FA1 – 0056 – 000		1	BUSHING ブッシング	
2	FA2 – 8361 – 000		2	RETAINER キンテイ	
3	FA3 – 0314 – 000		2	BUSHING ブッシング	
4	FA5 – 8743 – 000		2	BUSHING ブッシング	
5	FB2 – 8846 – 000		1	HANDLE トッテ	
6	FB2 – 0673 – 000		1	PLATE, RELEASE, SOLENOID ソレノイド トリツケ バン	
7	FB2 – 0674 – 000		1	STOP, ROLLER ローラ ストッパ	
8	FB2 – 0675 – 020		1	LINK, ROLLER, STOP ローラ ストッパ リンク	
9	FB2 – 0678 – 000		1	STOP, CLEANING クリーナ ストッパ	
10	FB2 – 0679 – 000		1	LEVER, LOWER シタ レバー	
11	FB2 – 1049 – 000		1	PLATE, MOUNTING, SENSOR センサ ダイ	
12	FB2 – 9033 – 000		1	SHEET, SUPPORT トッテ ホゴ シート	
13	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J169
14	FB2 – 1057 – 000		1	SHAFT, DRIVE キュウチャク クドウ ジク	
15	FB2 – 1058 – 000		1	COVER, 32P 32P カバー	
16	FB2 – 1059 – 000		1	PLATE, SOLENOID レジスト ソレノイド シバン	
17	FB2 – 1060 – 020		1	PLATE, SOLENOID キュウチャク ガイド ソレノイド シバン	
18	FB2 – 1061 – 000		1	PLATE, HARNESS ハーネス シバン	
19	FB2 – 1062 – 000		1	MOUNT, CONNECTOR コネクタ ダイ	
20	FB2 – 9032 – 000		1	PLATE, STOP クラッチ マワリ ドメ	
21	FB2 – 1069 – 000		2	ARM, PRESSURE, REGISTRATION レジスト ヨウドウ アーム	
22	FB2 – 1169 – 030		1	PLATE, TANK MOUNTING タンク ダイ	
23	FB2 – 1170 – 020		1	OIL RECEPTACLE オイル ウケ	
24	FB2 – 1851 – 000		1	PLATE, MAGNET, LEFT マグネット シバン (ヒダリ)	
25	FB2 – 9033 – 000		1	SHEET, SUPPORT トッテ ホゴ シート	
26	FF5 – 2162 – 000		1	PIN, POSITIONING イチギメ ピン	
27	FF5 – 2163 – 020		1	PLATE, DRIVE, REGISTRATION レジスト クドウ バン	
28	FB3 – 7679 – 000		1	PLATE, GROUNDING アース バン	
29	FB3 – 6022 – 000		1	COVER, SPRING CLUTCH スプリング クラッチ カバー	

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
535 –	30	FG5 – 3139 – 000		1	TRANSFER FRAME CABLE ASSEMBLY テンシャ ワク ソクセン	J183 – 191,211,212,304
	31	FG5 – 5649 – 030		1	FEEDER ASSEMBLY テイチャク ハンソウ ブ	100V
		FG5 – 5659 – 020		1	FEEDER ASSEMBLY テイチャク ハンソウ ブ	115/120/220/240V
	32	FF5 – 2206 – 030		1	ROLLER, DRIVE, REGISTRATION レジスト クドウ ローラ	
	33	FF5 – 2207 – 000		1	ROLLER, REGISTRATION レジスト ジュウドウ ローラ	
	34	FF5 – 2224 – 000		1	PLATE, SHAFT, LINK リンク ジク シバン	
	35	FH7 – 5473 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL9 J184
	36	FH7 – 5478 – 000		2	SOLENOID, DC24V ソレノイド	SL9,10 J211,212
	37	FS1 – 1190 – 000		1	BUSHING ブッシング	
	38	FS1 – 1202 – 000		2	BUSHING ブッシング	
	39	FS1 – 1402 – 000		1	BUSHING ブッシング	
	40	FS1 – 1508 – 000		1	BUSHING ブッシング	
	41	FS1 – 1595 – 000		2	BUSHING ブッシング	
	42	FB3 – 7684 – 000		1	PIN, RETAINING リテーナ	
	43	FS5 – 0708 – 000		1	GEAR, 19T 19T ギア	
	44	FS5 – 0710 – 000		2	GEAR, 16T 16T ギア	
	45	FS5 – 0711 – 000		1	GEAR, 30T 30T ギア	
	46	FS5 – 0717 – 000		1	GEAR, 18T 18T ギア	
	47	FS5 – 0993 – 000		1	GEAR, 21T 21T ギア	
	48	FS5 – 2587 – 000		1	SPRING, TENSION ヒッパリ バネ	
	49	FS5 – 2612 – 000		1	SPRING, COMPRESSION アッシュク バネ	
	50	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
	51	XD9 – 0103 – 000		2	PIN,DOWEL ヘイコウ ピン	
	52	XD9 – 0104 – 000		1	PIN,DOWEL ヘイコウ ピン	
	53	XZ9 – 0251 – 000		1	CATCH, MAGNET マグネット キャッチ	
	54	FB2 – 9917 – 000		1	COVER, OIL オイル フタ	
	55	FA5 – 9132 – 000		2	PULLEY プーリ	
	56	FB2 – 0681 – 000		1	BELT, FEED ハンソウ ベルト	
	57	FG5 – 7339 – 020		1	REGIST. SPRING CLUTCH ASS'Y レジスト ローラ カイジョ バネ クラッチ ブ	
	58	FB2 – 9128 – 020		1	SHAFT, DRIVE, FEED ハンソウ クドウ ジク	

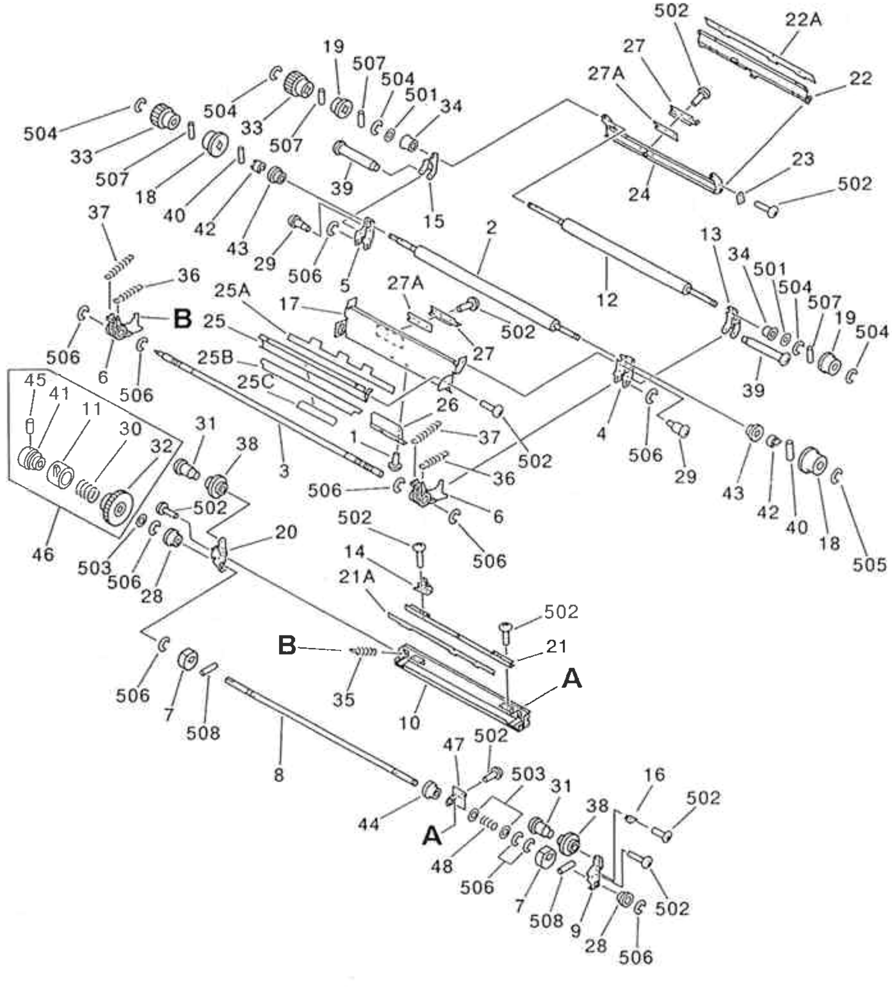
FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
535 − 59	FB2 − 9184 − 000		1	SHAFT, IDLER, FEED ハンソウ アイドラ ジク	
60	FB2 − 9126 − 020		1	GUIDE, FEED ハンソウ ガイド	
61	FS1 − 0708 − 000		1	GEAR, 20T 20T ギア	
62	FS5 − 0713 − 000		1	GEAR, 30T 30T ギア	
63	XD9 − 0108 − 000		2	PIN,DOWEL ヘイコウ ピン	
64	FB2 − 0512 − 000		1	SPRING, COMPRESSION アッシュク バネ	
65	FB2 − 0514 − 000		1	LEVER, DRIVE, SEPARATION CLAW ブンリ ツメ クドウ レバー	
66	FB2 − 0515 − 000		1	ARM, DRIVE, SEPARATION CLAW ブンリ ツメ クドウ アーム	
67	FB2 − 0518 − 000		1	PLATE, SEP. SOLENOID MOUNTING ブンリ ソレノイド トリツケ バン	
68	FF5 − 2284 − 000		1	SHAFT, DRIVE, SEPARATION CLAW ブンリ ツメ クドウ ジク	
69	FH7 − 5345 − 000		1	SOLENOID, DC24V DC ソレノイド	SL8 J183
70	FS1 − 1205 − 000		2	BUSHING ブッシング	
71	FB2 − 0608 − 000		1	PIN, LOCK LEVER ロック レバー ピン	
72	FB2 − 0609 − 000		1	LEVER, LOCK, LOWER ロック レバー (シタ)	
73	FB2 − 0610 − 000		1	SHAFT, LEVER レバー ジク	
74	FS5 − 2602 − 000		1	SPRING, COMPRESSION アッシュク バネ	
75	FB2 − 0603 − 000		1	SHAFT, LOCK LEVER ロック レバー ジク	
76	FB2 − 0604 − 000		1	HOLDER, LOCK, LEVER ロック レバー ホルダ	
77	FB2 − 0607 − 000		1	LEVER, LOCK, UPPER ロック レバー (ウエ)	
78	FF5 − 2221 − 000		1	LINK, LEVER レバー リンク	
79	FS5 − 1374 − 000		1	BUSHING ブッシング	
80	FS5 − 2603 − 000		1	SPRING, COMPRESSION アッシュク バネ	
81	FS5 − 2604 − 000		1	SPRING, TENSION ヒッパリ バネ	
82	FS6 − 2161 − 000		1	SPRING, COMPRESSION アッシュク バネ	
83	FA9 − 1954 − 000		1	BOSS ボス	
84	FS5 − 6363 − 000		1	WASHER ワッシャ	
85	FS5 − 6362 − 000		1	STOPPER, THRUST スラスト ストッパ	
86	FS1 − 1449 − 000		1	BUSHING ブッシング	
87	FS1 − 1462 − 000		2	BUSHING ブッシング	
88	FF5 − 2367 − 000		1	PLATE, STOP ギャク カイテン ボウシ バン	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
535 - 88A	FB2 - 0633 - 000		1	DAMPER ダンパ	
89	XA9 - 0724 - 000		2	SCREW,RS,M3X8 RS タイト ネジ	
90	WT2 - 0434 - 000		13	CLIP, CABLE ロッキング ワイヤ サドル	
91	FS6 - 2143 - 000		1	SPRING, TENSION ヒッパリ バネ	
92	FC2 - 3083 - 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	KOREAN
	ME1 - 0038 - 000		1	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	EXCEPT KOREAN
93	FG5 - 3178 - 000		1	OHP SENSOR ASSEMBLY 2 OHP センサ ブ (ハツコウ)	
93A	VR5 - 3680 - 510		1	RESISTOR, 51 OHM, 1/4W テイコウ	R1
93B	VR5 - 7260 - 501		1	RESISTOR, VARIABLE カヘン テイコウ	VR1
93C	VS1 - 1029 - 002		1	PIN ASSEMBLY, 2P ピン アセンブリ	J10
93D	WG1 - 5370 - 000		1	LED, TLN110 LED	Q1
93E	FA5 - 9710 - 000		1	CAP, SENSOR センサ キャップ	
94	VS1 - 5057 - 002		3	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J184,211,212
95	VS1 - 5057 - 007		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J190
96	FH7 - 5153 - 000		1	SOLENOID, DC24V ソレノイド	SL11
97	FB2 - 0676 - 000		1	RAIL カイジョ レール	
98	FS5 - 0720 - 020		1	GEAR, 20T 20T ギア	
99	WT2 - 5056 - 000		1	CLIP, CABLE エッジ サドル	
100	WT2 - 5011 - 000		4	CLIP, CABLE エッジ サドル	
101	VS1 - 5057 - 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J174
102	FS1 - 2651 - 000		1	SPRING, TORSION ネジリ バネ	
103	FS3 - 0007 - 020		1	GEAR, 32T 32T ギア	
104	FB2 - 1190 - 000		1	TUBE, 2 チューブ (2)	
105	FB2 - 1163 - 000		1	ARM, SWING ヨウドウ アーム	
106	FB2 - 1162 - 030		1	CAP, OIL SUPPLY キョウキュウ グチ	
107	FB2 - 1161 - 000		1	MOUNT, OIL SUPPLY UNIT オイル キョウキュウ キ ダイ	
108	FS5 - 2630 - 000		1	SPRING, TENSION ヒツパリ バネ	
109	FA4 - 9152 - 000		1	SHAFT, CLAW ツメ ジク	
110	FS2 - 1249 - 000		2	BUSHING ブッシング	
111	WT2 - 0262 - 000		21	CLIP, CABLE ロッキング ワイヤ サドル	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
535 – 112	FB2 – 0629 – 000		1	MOUNT, LEVER SUPPORT トッテ ササエ ダイ	
113	FG5 – 3145 – 000		1	CABLE, LED レジ マエ LED ソクセン	J177,188
114	FG5 – 3137 – 000		1	CABLE, TRANSFER テンシャ ドラム ソクセン	J169 – 172,174
115	FG5 – 2696 – 030		1	OIL RECOVERY TANK ASSEMBLY オイル タンク ブ	
115A	FB2 – 1156 – 020		1	TANK, OIL RECOVERY オイル タンク	
115B	FB2 – 1158 – 020		1	CAP キャップ	
115C	FB2 – 1159 – 000		1	SEAL, CAP キャップシール	
116	FS5 – 2549 – 000		1	SPRING, TORSION ネジリ バネ	
117	FH7 – 5244 – 030		1	PUMP, ELECTROMAGNETIC, DC24V デンジ ポンプ	SL12 J185
118	FC1 – 8097 – 000		1	HOLDER, STOP ストッパ	
119	FC1 – 1222 – 000		1	FILTER, OIL オイル フィルタ	
120	FB2 – 1191 – 020		1	TUBE, 3 チューブ (3)	
121	WT2 – 0270 – 000		1	BUSHING ブッシング	
122	WT2 – 5035 – 000		2	CLIP, CABLE エッジ サドル	
123	FB2 – 1067 – 020		1	SHAFT, REGISTRATION CAM レジスト カム シャフト	
124	FB2 – 1068 – 020		2	CAM, REGISTRATION レジスト カム	
125	FB2 – 1071 – 020		1	RING, CONTROL, RIGHT セイギョ カン (ミギ)	
126	WT2 – 5178 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
127	WT2 – 5018 – 000		4	CLIP, CABLE ロッキング ワイヤ サドル	
128	WT2 – 5222 – 000		3	HOLD, CABLE ケーブル オサエ	
129	WT2 – 0433 – 000		1	CLAMP, CABLE ソクセン バンド	
501	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2300 – 809		4	SCREW,MACH.,TRUSS HEAD,M3X8 バインド ネジ	
503	XB1 – 2400 – 607		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
504	XB6 – 2400 – 508		2	SETSCREW,M4X5 ロッカク アナツキ トメネジ	
505	XD2 – 1100 – 502		AR	RING,E E リング	
506	XD2 – 1100 – 642		AR	RING,E E リング	
507	XD2 – 2100 – 802		1	RING,GRIP グリップ リング	
508	XD3 – 1300 – 322		AR	PIN,SPRING スプリング ピン	
509	XB1 – 2300 – 409		4	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
535 – 510	XB1 – 2502 – 006		AR	SCREW,MACH.,TRUSS HEAD,M5X20 バインド ネジ	
511	XD1 – 1108 – 233		1	SHIM ヒョウジュン ワッシャ	
512	XD2 – 1100 – 802		2	RING,E E リング	
513	XD2 – 2300 – 402		1	RING,TOOTHED LOCK ハツキ トメワ	
514	XD1 – 1106 – 223		3	SHIM ヒョウジュン ワッシャ	
515	XD3 – 2200 – 142		1	PIN,DOWEL ヘイコウ ピン	

FIGURE 536 RETENSION ASSEMBLY 吸着ローラ部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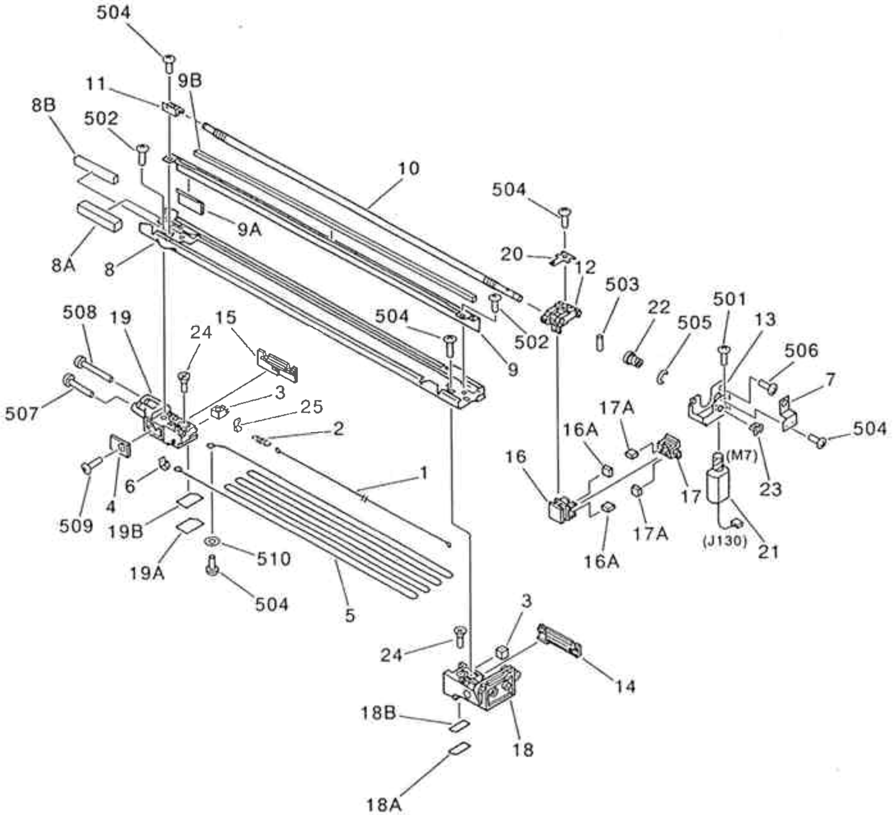
506

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
536 –	FG5 – 5658 – 160		1	RETENSION ASSEMBLY キュウチャク ローラ ブ	
1	FA2 – 9388 – 000		2	SCREW,MACH.,TRUSS HEAD,M3X5 バインド ネジ	
2	FB2 – 0992 – 000		1	ROLLER, ADSORPTION キュウチャク ローラ	
3	FB2 – 0995 – 000		1	SHAFT, SWING ヨウドウ チュウシン ジク	
4	FB2 – 0996 – 000		1	PLATE, SUPPORT, ROLLER, FRONT ローラ シジ バン (マエ)	
5	FB2 – 0997 – 000		1	PLATE, SUPPORT, ROLLER, REAR ローラ シジ バン (ウシロ)	
6	FB2 – 0998 – 000		2	ARM, SWING, ADSORPTION キュウチャク ヨウドウ アーム	
7	FB2 – 0999 – 000		2	CAM, ADSORPTION キュウチャク カム	
8	FB2 – 1000 – 030		1	SHAFT, CAM, ADSORPTION キュウチャク カム シャフト	
9	FB2 – 1001 – 000		1	PLATE, ADSORPTION, FRONT キュウチャク プレート (マエ)	
10	FB2 – 1003 – 020	N	1	CROSSMEMBER, ADSORPTION キュウチャク ステイ	
11	FB2 – 1004 – 020		1	RING, CONTROL, LEFT セイギョ カン (ヒダリ)	
12	FB2 – 4367 – 000		1	ROLLER ナラシ ローラ	
13	FB2 – 4368 – 000		1	ARM, FRONT アーム (マエ)	
14	FB2 – 4369 – 000		2	PLATE, LIFTING カアツ バン	
15	FB2 – 4371 – 000		1	ARM, REAR アーム (ウシロ)	
16	FB2 – 4375 – 000		1	BRUSH, GROUNDING アース ブラシ	
17	FB2 – 8918 – 020		1	GUIDE, ADSORPTION, RIGHT キュウチャク ガイド (ミギ)	
18	FB2 – 9116 – 000		2	COLLAR コロ	
19	FB2 – 9117 – 000		2	COLLAR ツキアテ コロ	
20	FF5 – 2167 – 000		1	PLATE, ADSORPTION, REAR キュウチャク プレート (ウシロ)	
21	FF5 – 2171 – 000		1	SCRAPER, 2 スクレーパ (2)	
21A	FB2 – 1008 – 000		1	SHEET, SCRAPER, 2 スクレーパ シート (2)	
22	FF5 – 2259 – 000		1	SCRAPER, 3 スクレーパ (3)	
22A	FB2 – 4372 – 000		1	SHEET, SCRAPER, 3 スクレーパ シート (3)	
23	FF5 – 2260 – 000		1	PLATE, SCRAPER スクレーパ シテン	
24	FF5 – 2267 – 000		1	MOUNT, SCRAPER, UPPER スクレーパ ダイ (ウエ)	
25	FF5 – 2365 – 040		1	GUIDE, ADSORPTION, LEFT キュウチャク ガイド (ヒダリ)	
25A	FB2 – 9941 – 020		1	SHEET, GUIDE, A ガイド シート (A)	
25B	FB3 – 0881 – 020		1	SHEET, GUIDE, B ガイド シート (B)	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
536 – 25C	FB3 – 5187 – 020		1	SHEET シート	
26	FF5 – 2387 – 000		1	SHEET シート	
27	FF5 – 4010 – 000		2	SCRAPER, 1 スクレーパ (1)	
27A	FB2 – 1007 – 000		1	SHEET, SCRAPER, 1 スクレーパ シート (1)	
28	FS1 – 1462 – 000		2	BUSHING ブッシング	
29	FS1 – 9228 – 000		2	SCREW, STEPPED, M3 ダンビス	
30	FS5 – 2632 – 000		1	SPRING, CLUTCH クラッチ バネ	
31	FS2 – 9001 – 000		2	SCREW,STEPPED,M4 ダン ビス	
32	FS5 – 0718 – 020		1	GEAR, 32T 32T ギア	
33	FS5 – 0729 – 000		2	GEAR, 12T 12T ギア	
34	FS5 – 1376 – 000		2	BUSHING ブッシング	
35	FS5 – 2569 – 020		2	SPRING, TENSION ヒッパリ バネ	
36	FS5 – 2570 – 000		2	SPRING, TENSION ヒッパリ バネ	
37	FS5 – 2611 – 000		2	SPRING, TENSION ヒッパリ バネ	
38	FS5 – 6251 – 000		2	COLLAR ツキアテ コロ	
39	FS5 – 9212 – 000		2	SCREW,STEPPED,M3 ダン ビス	
40	XD9 – 0103 – 000		2	PIN,DOWEL ヘイコウ ピン	
41	FA9 – 1954 – 000		1	BOSS ボス	
42	FB3 – 2055 – 000		2	BLOCK, BEARING ベアリング ストッパ	
43	XG9 – 0350 – 000		2	BALL BEARING, NSK MF106ZZ1MC3 ボール ベアリング	
44	HS1 – 1031 – 000		1	BUSHING ブッシング	
45	XA9 – 0546 – 020		1	SCREW, M4X6 ダブル ポイント ネジ	
46	FG5 – 7340 – 050		1	ATTRACTION SPRING CLUTCH ASS'Y キュウチャク ヨウドウ バネ クラッチ ブ	
47	FB3 – 8165 – 000		1	PLATE ツキアテ バン	
48	FS6 – 2159 – 000		1	SPRING, COMPRESSION アッシュク バネ	
501	XD1 – 1104 – 135		2	SHIM ヒョウジュン ワッシャ	
502	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
503	XD1 – 1108 – 223		3	SHIM ヒョウジュン ワッシャ	
504	XD2 – 1100 – 322		5	RING,E E リング	
505	XD2 – 1100 – 502		1	RING,E E リング	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
536 – 506	XD2 – 1100 – 642		AR	RING,E E リング	
507	XD3 – 2160 – 062		4	PIN,DOWEL ヘイコウ ピン	
508	XD3 – 2200 – 162		2	PIN,DOWEL ヘイコウ ピン	

FIGURE 550 PRIMARY CORONA ASSEMBLY
1次帯電器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19B
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16A
(J130)
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18B
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18A

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
550 –	FG5 – 5634 – 050		1	PRIMARY CORONA ASSEMBLY 1ジ タイデンキ	
1	FY3 – 0030 – 000		AR	WIRE, CORONA, 0.06MM (20M) タイデンセン	100/115/120V
	FY3 – 0040 – 000		AR	WIRE, CORONA, 0.06MM (20M) タイデンセン	220/240V
2	97 – 5527 – 000		1	SPRING, TENSION タイデンセン ヒッパリ バネ	
3	FA3 – 2118 – 000		2	GUIDE, CORONA WIRE タイデンセン イチギメ	
4	FA5 – 9950 – 000		1	COVER, REAR, 1 フタ(ウシロ.1)	
5	Y81 – 0162 – 000		AR	WIRE, CORONA, 0.1MM (100M) タイデンセン	
6	FA5 – 9964 – 000		1	TERMINAL, CORONA WIRE, 2 デンキヨク (2)	
7	FB2 – 0480 – 000		1	PLATE, STOP トメ イタ	
8	FF5 – 2388 – 000		1	PLATE, SHIELD, UPPER シールド(ウエ)	
8A	FB3 – 5189 – 000		1	SEAL, FOAM, 2 シール (2)	
8B	FB3 – 5190 – 000		1	SEAL, FOAM, 3 シール (3)	
9	FF5 – 2349 – 020		1	PLATE, SHIELD, RIGHT シールド(ミギ)	
9A	FB2 – 0481 – 000		1	SHEET, INSULATION ゼツエン シート	
9B	FB3 – 5188 – 000		1	SEAL, FOAM, 1 シール (1)	
10	FB2 – 0428 – 020		1	SCREW, CLEANING リード ネジ	
11	FB2 – 0429 – 000		1	SUPPORT, SCREW スクリュ ウケ ダイ	
12	FB2 – 0430 – 000		1	CLEANING, WIRE, 1 ワイヤ クリーナ (1)	
13	FB2 – 0431 – 000		1	SUPPORT, MOTOR モータ シバン	
14	FB2 – 0432 – 000		1	COVER, FRONT フタ(マエ)	
15	FB2 – 0433 – 000		1	COVER, REAR フタ(ウシロ)	
16	FF2 – 3551 – 000		1	BLOCK, CLEANING クリーニング ブロック	
16A	FA6 – 4543 – 000		2	PAD, WIRE CLEANING クリーニング パット	
17	FF2 – 3552 – 000		1	HOLDER, FELT フェルト ホルダ	
17A	FA6 – 4543 – 000		2	PAD, WIRE CLEANING クリーニング パット	
18	FF5 – 2040 – 000		1	BLOCK, FRONT 1ジ マエ ブロック	
18A	FB2 – 0434 – 000		1	SHIELD, FRONT タンブ シールド(マエ)	
18B	FB2 – 0436 – 000		1	CUSHION, FRONT タンブ クッション(マエ)	
19	FF5 – 2041 – 000		1	BLOCK, REAR 1ジ ウシロ ブロック	
19A	FB2 – 0435 – 000		1	SHIELD, REAR タンブ シールド(ウシロ)	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
550 – 19B	FB2 – 0437 – 000		1	CUSHION, REAR タンブ クッション（ウシロ）	
20	FF5 – 2219 – 020		1	PIN, RELEASE クドウ カイジョ ピン	
21	FG5 – 6556 – 000		1	MOTOR, DC モータ	M7 J130
22	FS5 – 0715 – 000		1	GEAR, 14T 14T ギア	
23	FS5 – 1373 – 000		1	BUSHING ブッシング	
24	XA9 – 0014 – 000		2	SCREW, INSUL., C.S.HEAD, M4X12 ゼツエン ビス	
25	FB2 – 0479 – 000		1	TERMINAL ターミナル	
501	XB1 – 2200 – 409		2	SCREW,MACH.,TRUSS HEAD,M2X4 バインド ネジ	
502	XB1 – 2300 – 409		2	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
503	XD3 – 2160 – 082		1	PIN,DOWEL ヘイコウ ピン	
504	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
505	XD2 – 1100 – 322		1	RING,E E リング	
506	XB1 – 2301 – 009		1	SCREW,MACH.,TRUSS HEAD,M3X10 バインド ネジ	
507	XB1 – 2303 – 007		1	SCREW,MACH.,TRUSS HEAD,M3X30 バインド ネジ	
508	XB1 – 2304 – 007		1	SCREW,MACH.,TRUSS HEAD,M3X40 バインド ネジ	
509	XB4 – 7300 – 609		1	SCREW,TAPPING,TRUSS HEAD,M3X6 バインド タッピン ネジ	
510	XD1 – 2100 – 307		1	WASHER,PLAIN ヒラ ザガネ	

FIGURE 580 SEPARATION CORONA ASSEMBLY
分離帯電器

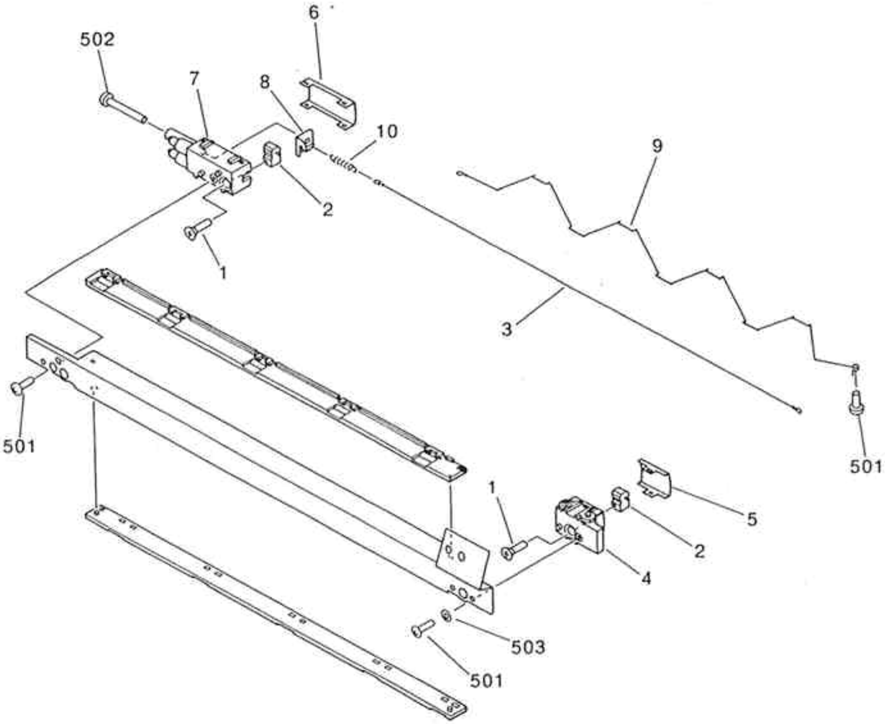

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FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
580 –	FG5 – 5843 – 030		1	SEPARATION CORONA ASSEMBLY ブンリ タイデン キ	
1	XA9 – 0352 – 000		2	SCREW, M4X18 ネジ	
2	FA1 – 9467 – 000		2	GUIDE, CORONA WIRE タイデンセン イチギメ	
3	FY3 – 0030 – 000		AR	WIRE, CORONA, 0.06MM (20M) タイデンセン	100/115/120V
	FY3 – 0040 – 000		AR	WIRE, CORONA, 0.06MM (20M) タイデンセン	220/240V
4	FB3 – 1459 – 000		1	HOUSING, FRONT ブロック (マエ)	
5	FA5 – 9099 – 000		1	COVER, FRONT フタ (マエ)	
6	FA5 – 9101 – 000		1	COVER, REAR フタ (ウシロ)	
7	FB2 – 0636 – 000		1	HOUSING, CORONA, REAR タイデン ブロック (ウシロ)	
8	FB2 – 0639 – 000		1	TERMINAL, CORONA WIRE タイデン デンキョク	
9	FA5 – 1876 – 000		1	WIRE, AMIRAN 0.148MM (50M) テグス	
10	FS2 – 2551 – 000		1	SPRING, TENSION, CORONA WIRE タイデンセン ヒッパリ バネ	
501	XB1 – 2300 – 409		3	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
502	XB1 – 2303 – 007		1	SCREW,MACH.,TRUSS HEAD,M3X30 バインド ネジ	
503	XD1 – 2100 – 307		1	WASHER,PLAIN ヒラ ザガネ	

FIGURE 585 INTERNAL CORONA ASSEMBLY
内除帯電器

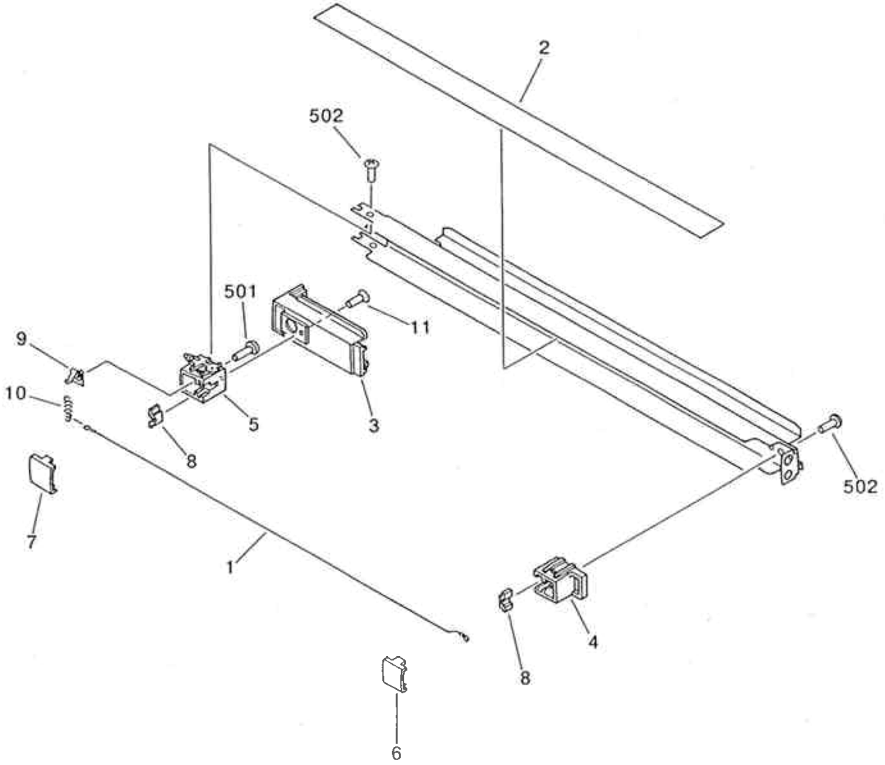
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FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
585 –	FG5 – 5840 – 060		1	INTERNAL CORONA ASSEMBLY ウチジョ タイデンキ	
1	FY3 – 0030 – 000		AR	WIRE, CORONA, 0.06MM (20M) タイデンセン	100/115/120V
	FY3 – 0040 – 000		AR	WIRE, CORONA, 0.06MM (20M) タイデンセン	220/240V
2	FB2 – 0643 – 020		1	SHEET, INSULATING ゼツエン シート	
3	FB2 – 0642 – 000		1	MOUNT, SUPPORT コテイ ダイ	
4	FC1 – 1078 – 000		1	HOUSING, FRONT ブロック (マエ)	
5	FB3 – 1461 – 000		1	HOUSING, REAR ブロック (ウシロ)	
6	FA5 – 9099 – 000		1	COVER, FRONT フタ (マエ)	
7	FC1 – 1081 – 000		1	COVER, REAR フタ (ウシロ)	
8	FC1 – 1085 – 000		2	GUIDE, CORONA WIRE タイデン セン イチギメ	
9	FC1 – 1102 – 000		1	TERMINAL, CORONA WIRE タイデン キ デンキョク	
10	FS2 – 2551 – 000		1	SPRING, TENSION, CORONA WIRE タイデンセン ヒッパリ バネ	
11	XA9 – 0015 – 000		1	SCREW, M3X6 ネジ	
501	XB1 – 2301 – 002		1	SCREW,MACH.,TRUSS HEAD,M3X10 バインド ネジ	
502	XB4 – 7300 – 505		3	SCREW,TAPPING,TRUSS HEAD,M3X5 バインド タッピン ネジ	

FIGURE 590 OUTER CORONA ASSEMBLY
外除帯電器

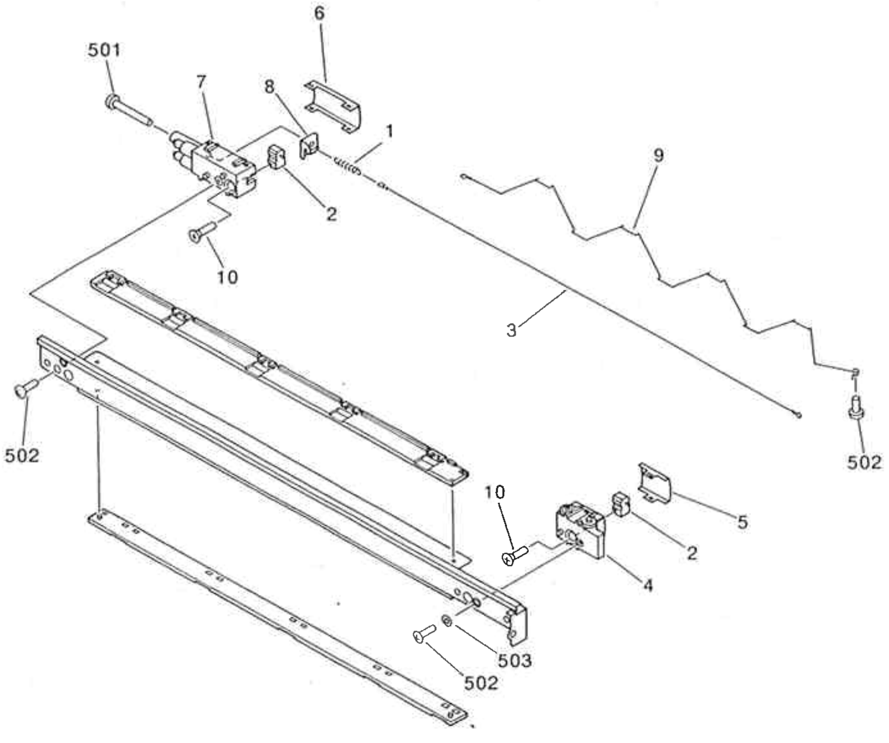
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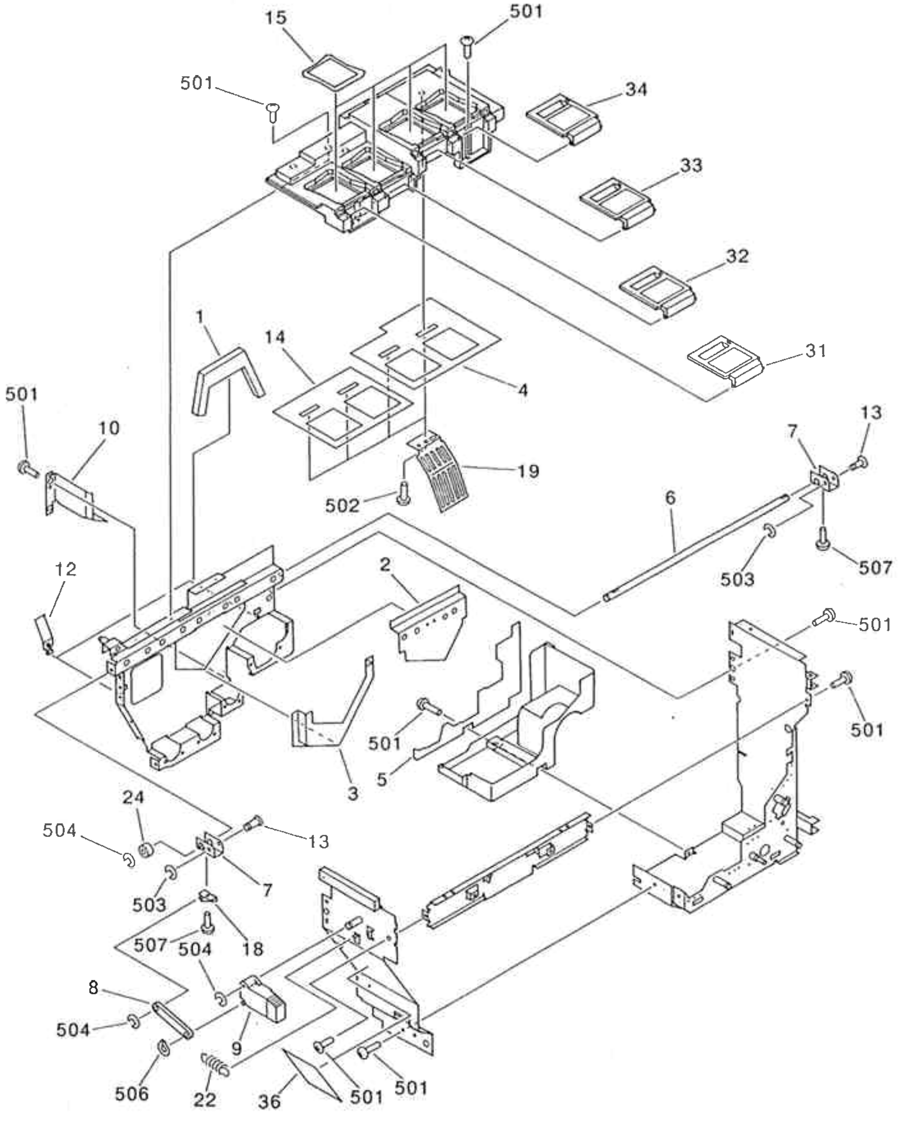
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
590 –	FG5 – 5844 – 000		1	OUTER CORONA ASSEMBLY ソトジョ タイデンキ	
1	FS2 – 2551 – 000		1	SPRING, TENSION, CORONA WIRE タイデンセン ヒッパリ バネ	
2	FA1 – 9467 – 000		2	GUIDE, CORONA WIRE タイデンセン イチギメ	
3	FY3 – 0030 – 000		AR	WIRE, CORONA, 0.06MM (20M) タイデンセン	100/115/120V
	FY3 – 0040 – 000		AR	WIRE, CORONA, 0.06MM (20M) タイデンセン	220/240V
4	FB3 – 1459 – 000		1	HOUSING, FRONT ブロック (マエ)	
5	FA5 – 9099 – 000		1	COVER, FRONT フタ (マエ)	
6	FA5 – 9101 – 000		1	COVER, REAR フタ (ウシロ)	
7	FB2 – 0636 – 000		1	HOUSING, CORONA, REAR タイデン ブロック (ウシロ)	
8	FB2 – 0639 – 000		1	TERMINAL, CORONA WIRE タイデン デンキョク	
9	FA5 – 1876 – 000		1	WIRE, AMIRAN 0.148MM (50M) テグス	
10	XA9 – 0352 – 000		2	SCREW, M4X18 ネジ	
501	XB1 – 2303 – 007		1	SCREW,MACH.,TRUSS HEAD,M3X30 バインド ネジ	
502	XB1 – 2300 – 409		3	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
503	XD1 – 2100 – 307		1	WASHER,PLAIN ヒラ ザガネ	

FIGURE 620 HOPPER MOUNT ASSEMBLY ($^1/_2$)
ホッパ台部 ($^1/_2$)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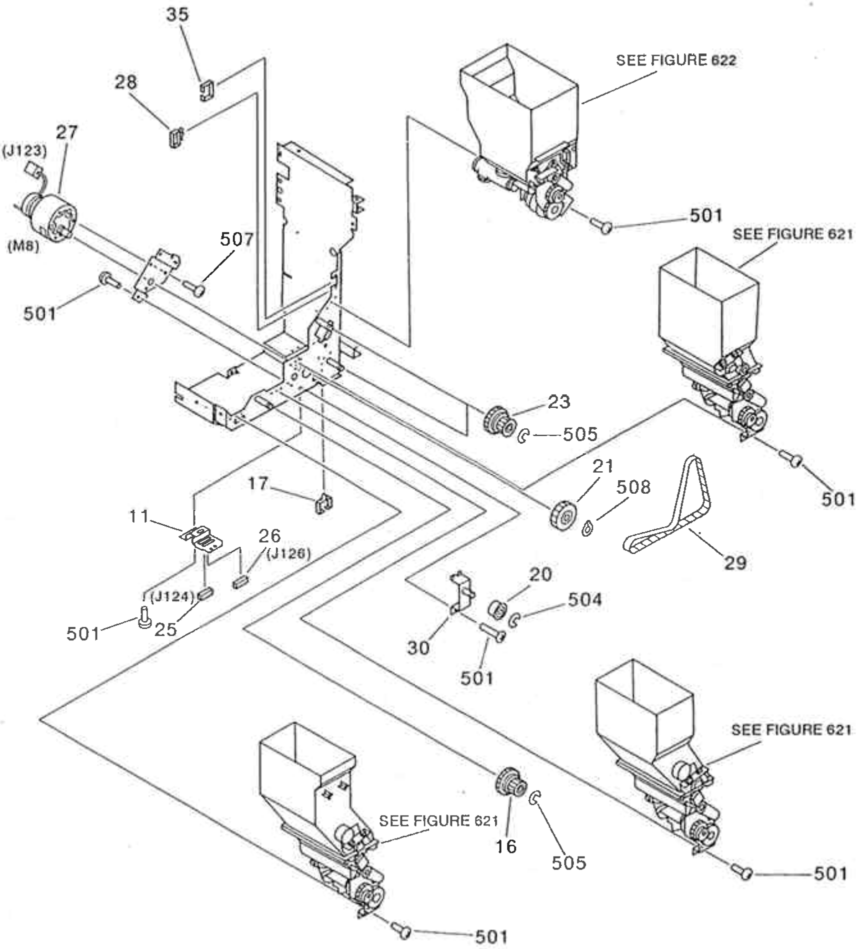
501

NOTE : This assembly does not include the part shown with key No. 36.

注 ： このユニットに、 Key No. 36の部品は含まれません。

FIGURE 620 HOPPER MOUNT ASSEMBLY (2/2)
ホッパ台部 (2/2)


35
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(J123)
(M8)
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501
SEE FIGURE 622
501
SEE FIGURE 621
23
505
501
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508
17
11
26
(J126)
(J124)
501
25
29
20
504
30
501
SEE FIGURE 621
SEE FIGURE 621
16
505
501
501

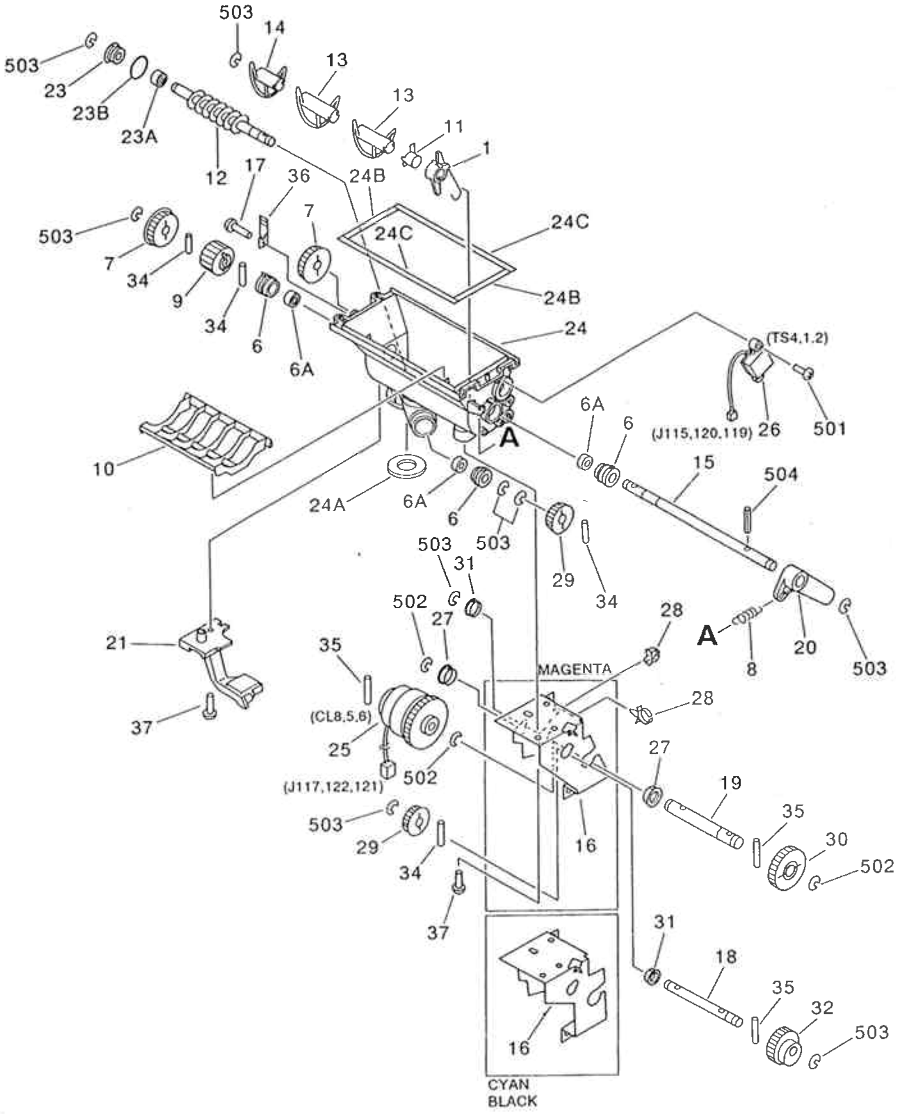
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
620 –	FG5 – 4703 – 120		1	HOPPER MOUNT ASSEMBLY ホッパ ダイ ブ	
1	FB3 – 1419 – 000		1	SEAL, HOPPER, 3 ホッパ シール (3)	
2	FB3 – 1418 – 000		1	SEAL, HOPPER, 2 ホッパ シール (2)	
3	FB3 – 1417 – 000		1	SEAL, HOPPER, 1 ホッパ シール (1)	
4	FB3 – 1774 – 000		1	SEAL, LOWER, 2 シール (2)	
5	FB2 – 9915 – 000		1	SEAL, TONER CASE トナー ケース シール	
6	FB2 – 0766 – 000		1	SHAFT, LOCK ロック ジク	
7	FB2 – 0767 – 000		2	PLATE, LOCK ロック	
8	FB2 – 0769 – 000		1	LINK, RELEASE カイジョ リンク	
9	FB2 – 0770 – 000		1	LEVER, RELEASE カイジョ レバー	
10	FB2 – 0771 – 000		1	PLATE, SEPARATION シキリ バン	
11	FB2 – 0773 – 000		1	PLATE, SUPPORT, PANEL パネル シバン	
12	FB2 – 0776 – 000		2	SPRING, LEAF イタ バネ	
13	FB2 – 0777 – 000		2	PIN ピン	
14	FB3 – 1773 – 000		1	SEAL, LOWER, 1 シール (1)	
15	FB2 – 0717 – 000		4	SEAL, UPPER シール (ウエ)	
16	FS5 – 3249 – 000		1	GEAR, 40T/PULLEY, 25T 40T ギア /25T プーリ	
17	WT2 – 5018 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
18	FF5 – 2125 – 000		1	SUPPORT, LOCK ロック シバン	
19	FB3 – 2046 – 000		4	PLATE, TONER GUIDE トナー ガイド バン	
20	FS2 – 3512 – 000		1	PULLEY プーリ	
21	FS5 – 0697 – 000		1	GEAR, 40T 40T ギア	
22	FS5 – 2560 – 000		1	SPRING, TENSION ヒッパリ バネ	
23	FS5 – 1511 – 000		2	GEAR, 40T/PULLEY, 25T 40T ギア /25T プーリ	
24	FS5 – 6246 – 000		1	ROLLER コロ	
25	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J124
26	VS1 – 5057 – 012		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J126
27	FH6 – 1016 – 000		1	MOTOR, DC 24V モータ	M8 J123
28	WT2 – 0317 – 000		2	CLIP, CABLE ロッキング ワイヤ サドル	
29	XF9 – 0549 – 000		1	BELT, TIMING タイミング ベルト	

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
620 –	30	FF5 – 4025 – 000		1	MOUNT, TENSIONER テンショナ ダイ	
	31	FB2 – 9111 – 000		1	PLATE, COVER トナー フタ	BLACK
	32	FB2 – 0712 – 000		1	PLATE, COVER トナー フタ	MAGENTA
	33	FB2 – 9109 – 000		1	PLATE, COVER トナー フタ	CYAN
	34	FB2 – 9110 – 000		1	PLATE, COVER トナー フタ	YELLOW
	35	WT2 – 5011 – 000		1	CLIP, CABLE エッジ サドル	
	36	FS6 – 8070 – 000		1	LABEL, "CORONA" タイデンセン イチ ラベル	SEE NOTE
	501	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
	502	XB4 – 7400 – 809		4	SCREW,TAPPING,TRUSS HEAD,M4X8 バインド タッピン ネジ	
	503	XD2 – 1100 – 322		2	RING,E E リング	
	504	XD2 – 1100 – 502		4	RING,E E リング	
	505	XD2 – 1100 – 642		3	RING,E E リング	
	506	XD2 – 2100 – 402		1	RING,GRIP グリップ リング	
	507	XB1 – 2300 – 609		5	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
	508	XD2 – 2100 – 602		1	RING,GRIP グリップ リング	

FIGURE 621

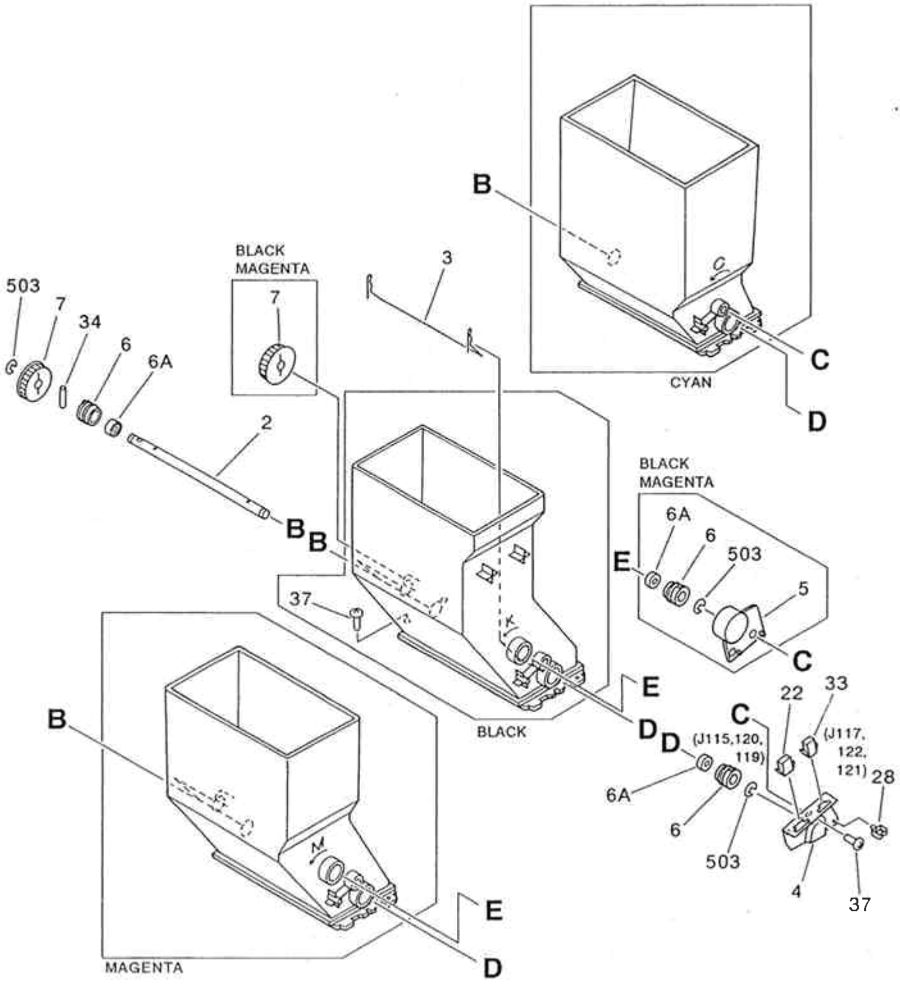
HOPPER ASSEMBLY (BK/M/C) ($^{1}/_{2}$)

ホッパ部（BK／M／C）（$^{1}/_{2}$）



503
14
503
13
23
23B
13
23A
11
1
12
17
36
24B
7
503
24C
24C
7
34
24B
9
34
6
24
6A
(TS4,1,2)
A
6A
6
26
501
(J115,120,119)
10
15
504
24A
6A
6
503
503
31
29
34
502
27
28
A
20
8
503
35
21
MAGENTA
28
(CL8,5,6)
25
27
37
502
(J117,122,121)
19
503
16
35
29
30
34
502
37
31
18
35
32
503
16
CYAN
BLACK

FIGURE 621 HOPPER ASSEMBLY (BK/M/C) ($^2/_2$)
ホッパ部（BK／M／C）（$^2/_2$）



B
C
D
CYAN
3
BLACK
MAGENTA
7
503
7
34
6
6A
2
B
B
37
BLACK
E
D
BLACK
MAGENTA
6A
6
503
5
E
C
B
E
D
MAGENTA
C
22
33
D
(J115,120,
119)
(J117,
122,
121)
28
6A
6
503
4
37

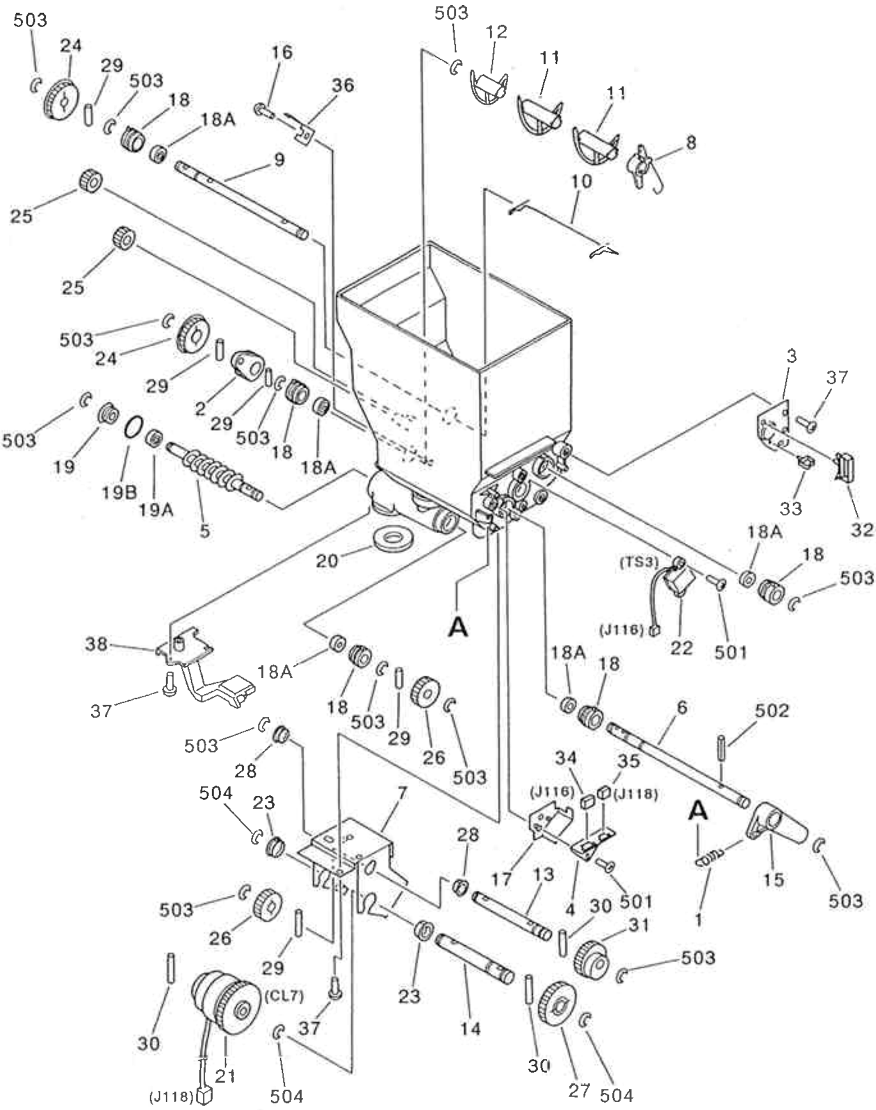
FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
621 –	FG5 – 4698 – 070		1	HOPPER ASSEMBLY ホッパ ブ	BLACK
	FG5 – 4699 – 070		1	HOPPER ASSEMBLY ホッパ ブ	MAGENTA
	FG5 – 4700 – 070		1	HOPPER ASSEMBLY ホッパ ブ	CYAN
1	FB3 – 2048 – 000		1	WIPER, SENSOR センサ ワイパ	
2	FB3 – 1452 – 000		2	SHAFT, STIRRING, 1 カクハン ジク (1)	BLACK/MAGENTA
	FB3 – 1452 – 000		1	SHAFT, STIRRING, 1 カクハン ジク (1)	CYAN
3	FB2 – 0725 – 000		2	BAR, STIRRING カクハン ボウ	BLACK/MAGENTA
	FB2 – 0725 – 000		1	BAR, STIRRING カクハン ボウ	CYAN
4	FB2 – 0726 – 000		1	PLATE, SUPPORT, PANEL パネル シバン	
5	FB2 – 0791 – 000		1	GUIDE, CABLE ソクセン ガイド	BLACK/MAGENTA
6	FF5 – 4081 – 000		7	BUSHING ブッシング	BLACK/MAGENTA
	FF5 – 4081 – 000		5	BUSHING ブッシング	CYAN
6A	XG9 – 0111 – 000		1	SEAL, OIL オイル シール	
7	FS6 – 0322 – 000		5	GEAR, 23T 23T ギア	BLACK/MAGENTA
	FS6 – 0322 – 000		3	GEAR, 23T 23T ギア	CYAN
8	97 – 5987 – 000		1	SPRING, TENSION ヒッパリ バネ	
9	FB2 – 9002 – 000		1	RATCHET ラチェット	
10	FB2 – 0723 – 040		1	GUIDE, TONER SUPPLY ホキュウ グチ	
11	FB2 – 0727 – 000		1	HOLDER, SENSOR センサ ホルダ	
12	FB2 – 0741 – 000		1	SCREW, STIRRING, FEED ハンソウ スクリュ	
13	FB2 – 0742 – 020		2	BLADE, STIRRING, 1 カクハン ハネ (1)	
14	FB2 – 0743 – 000		1	BLADE, STIRRING, 2 カクハン ハネ (2)	
15	FB2 – 8999 – 000		1	SHAFT, STIRRING, 2 カクハン ジク (2)	
16	FB2 – 9000 – 020		1	PLATE, DRIVE, FRONT クドウ シバン (マエ)	BLACK/CYAN
	FB2 – 8997 – 020		1	PLATE, DRIVE, FRONT クドウ シバン (マエ)	MAGENTA
17	XA9 – 0596 – 000		4	SCREW, P, M3X6 P タイト ネジ	
18	FB2 – 0747 – 000		1	SHAFT, DRIVE クドウ ジク	
19	FB2 – 0748 – 000		1	SHAFT, CLUTCH クラッチ ジク	
20	FB2 – 0749 – 000		1	ARM, ONE – WAY ワンウェイ アーム	
21	FG5 – 5970 – 030		1	HOPPER SHUTTER (M,C,BK) ホッパ シャッタ (M,C,BK)	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
621 – 22	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	BLACK J115 MAGENTA J120 CYAN J119
23	FF5 – 2128 – 000		1	BUSHING ブッシング	
23A	XG9 – 0111 – 000		1	SEAL, OIL オイル シール	
23B	XG9 – 0344 – 000		1	RING, O O リング	
24	FF5 – 4021 – 000		1	CASE, TONER, LOWER トナー ヨウキ (シタ)	
24A	FB2 – 0750 – 000		1	SEAL シール	
24B	FB2 – 0751 – 000		2	SEAL, 1 ヨウキ シール (1)	
24C	FB2 – 0752 – 000		2	SEAL, 2 ヨウキ シール (2)	
25	FH7 – 5471 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	BLACK CL8 J117 MAGENTA CL5 J122 CYAN CL6 J121
26	FH7 – 7310 – 000		1	SENSOR, TONER トナー センサ	BLACK TS4 J115 MAGENTA TS1 J120 CYAN TS2 J119
27	FS1 – 1449 – 000		2	BUSHING ブッシング	
28	WT2 – 5026 – 000		3	CLIP, CABLE クランプ	
29	FS5 – 0696 – 000		2	GEAR, 16T 16T ギア	
30	FS5 – 0736 – 000		1	GEAR, 31T 31T ギア	
31	FS5 – 1372 – 000		2	BUSHING ブッシング	
32	FS5 – 0695 – 000		1	GEAR, 24T 24T ギア	
33	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	BLACK J117 MAGENTA J122 CYAN J121
34	XD9 – 0104 – 000		6	PIN,DOWEL ヘイコウ ピン	BLACK/MAGENTA
	XD9 – 0104 – 000		5	PIN,DOWEL ヘイコウ ピン	CYAN
35	XD9 – 0108 – 000		3	PIN,DOWEL ヘイコウ ピン	
36	FF5 – 4060 – 000		1	SPRING, TENSION ラチェット バネ	
37	XA9 – 0614 – 000		4	SCREW, P, M3X8 P タイト ネジ	
501	XB1 – 2300 – 609		2	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XD2 – 1100 – 642		3	RING,E E リング	
503	XD2 – 1100 – 502		13	RING,E E リング	BLACK/MAGENTA
	XD2 – 1100 – 502		11	RING,E E リング	CYAN

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
621 − 504	XD3 − 1200 − 122		1	PIN,SPRING スプリング ピン	

FIGURE 622 HOPPER ASSEMBLY (Y)

ホッパ部 (Y)


503
24
29
503
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18A
16
36
9
25
25
503
24
29
2
29
503
18
18A
503
19
19B
19A
5
503
12
11
11
8
10
3
37
33
32
18A
18
503
(TS3)
(J116)
22
501
20
A
38
37
18A
18
503
29
26
503
503
28
504
23
7
18A
18
6
502
34
35
(J116)
(J118)
A
17
4
501
15
503
1
28
13
30
31
503
503
26
29
30
(CL7)
37
21
(J118)
504
23
14
30
27
504

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
622 –	FG5 – 5668 – 040		1	HOPPER ASSEMBLY ホッパ ブ	YELLOW
1	97 – 5987 – 000		1	SPRING, TENSION ヒッパリ バネ	
2	FB2 – 9002 – 000		1	RATCHET ラチェット	
3	FB2 – 0728 – 000		1	SUPPORT, GUIDE, CABLE ソクセン ガイド シバン	
4	FB2 – 0729 – 000		1	PLATE, SUPPORT, PANEL パネル シバン	
5	FB2 – 0731 – 000		1	SCREW, STIRRING, FEED ハンソウ スクリュ	
6	FB2 – 8995 – 000		1	SHAFT, STIRRING, 2 カクハン ジク (2)	
7	FB2 – 8996 – 000		1	PLATE, DRIVE, REAR クドウ シバン (ウシロ)	
8	FB3 – 2048 – 000		1	WIPER, SENSOR センサ ワイパ	
9	FB3 – 1453 – 000		1	SHAFT, STIRRING, 2 カクハン ジク (2)	
10	FB2 – 0737 – 000		1	BAR, STIRRING カクハン ボウ	
11	FB2 – 0742 – 020		2	BLADE, STIRRING, 1 カクハン ハネ (1)	
12	FB2 – 0743 – 000		1	BLADE, STIRRING, 2 カクハン ハネ (2)	
13	FB2 – 0747 – 000		1	SHAFT, DRIVE クドウ ジク	
14	FB2 – 0748 – 000		1	SHAFT, CLUTCH クラッチ ジク	
15	FB2 – 0749 – 000		1	ARM, ONE – WAY ワンウェイ アーム	
16	XA9 – 0596 – 000		3	SCREW, P, M3X6 P タイト ネジ	
17	FB2 – 0792 – 000		1	GUIDE, CABLE ソクセン ガイド	
18	FF5 – 4081 – 000		5	BUSHING ブッシング	
18A	XG9 – 0111 – 000		1	SEAL, OIL オイル シール	
19	FF5 – 2128 – 000		1	BUSHING ブッシング	
19A	XG9 – 0111 – 000		1	SEAL, OIL オイル シール	
19B	XG9 – 0344 – 000		1	RING, O O リング	
20	FB2 – 0750 – 000		1	SEAL シール	
21	FH7 – 5471 – 000		1	CLUTCH, ELECTROMAGNETIC デンジ クラッチ	CL7 J118
22	FH7 – 7310 – 000		1	SENSOR, TONER トナー センサ	TS3 J116
23	FS1 – 1449 – 000		2	BUSHING ブッシング	
24	FS6 – 0322 – 000		2	GEAR, 23T 23T ギア	
25	FS3 – 0703 – 000		2	GEAR, 13T 13T ギア	
26	FS5 – 0714 – 000		2	GEAR, 20T 20T ギア	

FIGURE & KEY NO.		PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
622 –	27	FS5 – 0736 – 000		1	GEAR, 31T 31T ギア	
	28	FS5 – 1372 – 000		2	BUSHING ブッシング	
	29	XD9 – 0104 – 000		5	PIN,DOWEL ヘイコウ ピン	
	30	XD9 – 0108 – 000		3	PIN,DOWEL ヘイコウ ピン	
	31	FS5 – 0695 – 000		1	GEAR, 24T 24T ギア	
	32	WT2 – 0317 – 000		2	CLIP, CABLE ロッキング ワイヤ サドル	
	33	WT2 – 5026 – 000		3	CLIP, CABLE クランプ	
	34	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J116
	35	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J118
	36	FF5 – 4060 – 000		1	SPRING, TENSION ラチェット バネ	
	37	XA9 – 0614 – 000		3	SCREW, P, M3X8 P タイト ネジ	
	38	FG5 – 5971 – 030		1	HOPPER SHUTTER (Y) ホッパ シャッタ (Y)	
	501	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
	502	XD3 – 1200 – 122		1	PIN,SPRING スプリング ピン	
	503	XD2 – 1100 – 502		AR	RING,E E リング	
	504	XD2 – 1100 – 642		3	RING,E E リング	

FIGURE 640 DEVELOPING ASSEMBLY (M/C/Y)
現像器（M／C／Y）

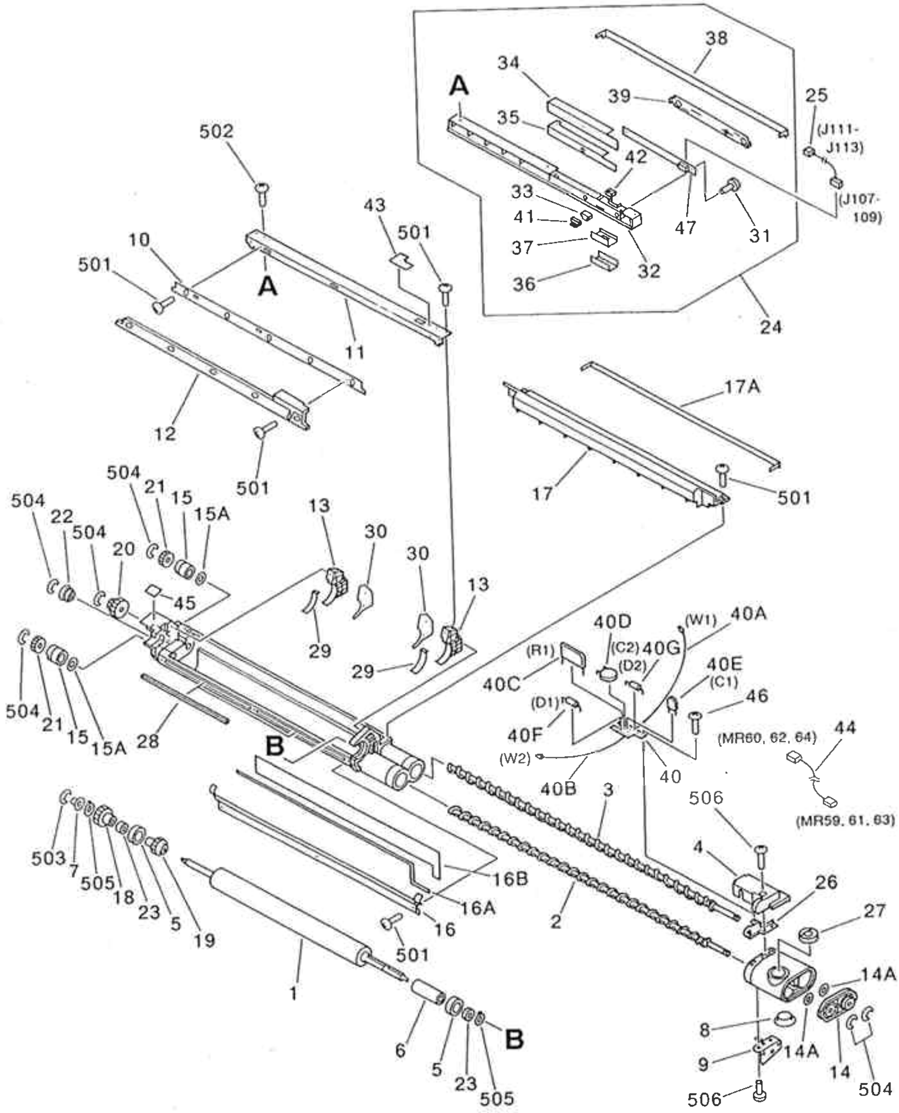

38
34
A
39
25
(J111-
J113)
35
42
33
(J107-
109)
41
47
31
37
32
36
24
502
43
501
10
501
A
11
12
501
17A
17
501
504
21
15
15A
504
22
504
20
45
13
30
30
13
29
29
504
21
15
15A
28
B
40D
(W1)
40A
(R1)
(C2)
40G
(D2)
40C
40E
(C1)
46
(D1)
40F
(MR60, 62, 64)
44
(W2)
40B
40
3
506
(MR59, 61, 63)
503
7
505
18
23
5
19
16B
16A
16
501
4
26
27
2
1
14A
6
5
23
505
B
8
14A
9
14
504
506

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
640 –	FG5 – 2591 – 090		1	DEVELOPING ASSEMBLY ゲンゾウキ	MAGENTA
	FG5 – 2592 – 090		1	DEVELOPING ASSEMBLY ゲンゾウキ	CYAN
	FG5 – 2593 – 090		1	DEVELOPING ASSEMBLY ゲンゾウキ	YELLOW
1	FB2 – 0262 – 000		1	CYLINDER, DEVELOPING ゲンゾウ シリンダ	MAGENTA
	FB2 – 0263 – 000		1	CYLINDER, DEVELOPING ゲンゾウ シリンダ	CYAN
	FB2 – 0264 – 000		1	CYLINDER, DEVELOPING ゲンゾウ シリンダ	YELLOW
2	FB2 – 0268 – 000		1	SCREW, 1 スクリュ (1)	
3	FB2 – 0269 – 000		1	SCREW, 2 スクリュ (2)	
4	FB2 – 0301 – 000		1	COVER, TERMINAL デンキョク フタ	
5	FB2 – 0303 – 030		2	ROLLER, SPACER ツキアテ コロ	
6	FB2 – 0304 – 000		1	COLLAR, SLEEVE スリーブ カラー	
7	FB3 – 7681 – 000		1	SLIDER, SLEEVE スリーブ スライダ	
8	FB2 – 0306 – 000		1	CAP, DEVELOPING ゲンゾウ キャップ	
9	FB2 – 0307 – 020		1	PLATE, STOP, DEVELOPING ゲンゾウ コテイ バン	
10	FB2 – 0308 – 000		1	BLADE ブレード	
11	FB2 – 0309 – 000		1	SUPPORT, BLADE ブレード シバン	
12	FB2 – 0311 – 000		1	COVER, BLADE, M, C ブレード カバー (M C)	MAGENTA/CYAN
	FB2 – 0312 – 000		1	COVER, BLADE, Y ブレード カバー (Y)	YELLOW
13	FB2 – 0272 – 000		2	HOLDER, SEAL, M シール ダイ (M)	MAGENTA
	FB2 – 0273 – 000		2	HOLDER, SEAL, C シール ダイ (C)	CYAN
	FB2 – 0274 – 000		2	HOLDER, SEAL, Y シール ダイ (Y)	YELLOW
14	FF5 – 2001 – 020		1	BUSHING ブッシング	
14A	FB2 – 8903 – 000		2	RING, MAGNET マグネット リング	
15	FF5 – 2002 – 000		2	BUSHING ブッシング	
15A	FB2 – 8903 – 000		1	RING, MAGNET マグネット リング	
16	FF5 – 2003 – 000	N	1	COVER, SLEEVE, M スリーブ カバー (M)	MAGENTA
	FF5 – 2004 – 000		1	COVER, SLEEVE スリーブ カバー (C)	CYAN
	FF5 – 2005 – 000		1	COVER, SLEEVE, Y スリーブ カバー (Y)	YELLOW
16A	FB2 – 0294 – 000		1	PLATE, SHIELD シールド バン	MAGENTA
	FB2 – 0295 – 000		1	PLATE, SHIELD シールド バン	CYAN

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
640 – 16A	FB2 – 0296 – 000		1	PLATE, SHIELD シールド バン	YELLOW
16B	FB2 – 9894 – 000		1	SHEET, INSULATING ゼツエン シート	MAGENTA/CYAN
17	FF5 – 2006 – 000	N	1	COVER, SIDE, M サイド カバー (M)	MAGENTA
	FF5 – 2007 – 000		1	COVER, SIDE, C, Y サイド カバー (C,Y)	CYAN/YELLOW
17A	FB2 – 0288 – 000		1	PACKING, FOAM, SIDE COVER サイド カバー パッキン	
18	FS5 – 0655 – 000		1	GEAR, 24T 24T ギア	
19	FS5 – 0656 – 000		1	GEAR, 24T 24T ギア	
20	FS5 – 0657 – 000		1	GEAR, 16T/24T 16T/24T ギア	
21	FS5 – 0658 – 000		2	GEAR, 16T 16T ギア	
22	FS5 – 0659 – 000		1	GEAR, 16T 16T ギア	
23	XG9 – 0219 – 000		2	BEARING, BALL ボール ベアリング	
24	FG5 – 2595 – 000		1	ATR UNIT ASSEMBLY ATR ユニット ブ	
25	FG5 – 3128 – 000		1	CABLE, ATR, M ATR ソクセン (M)	MAGENTA J107,111
	FG5 – 3129 – 000		1	CABLE, ATR, C ATR ソクセン (C)	CYAN J108,112
	FG5 – 3130 – 000		1	CABLE, ATR, Y ATR ソクセン (Y)	YELLOW J109,113
26	FB2 – 0298 – 000		1	PLATE, TERMINAL キョクキメ バン	
27	FB2 – 8706 – 030		1	SEAL, PIPE ホキュウグチ シール	
28	FB2 – 9893 – 000		2	SEAL, CASE シール	
29	FB2 – 0279 – 000		2	SEAL, MAGNET シール マグネット	MAGENTA/CYAN
30	FB2 – 0275 – 000		2	PLATE, SEAL シール プレート	MAGENTA
	FB2 – 0276 – 000		2	PLATE, SEAL シール プレート	CYAN/YELLOW
31	FA2 – 9388 – 000		2	SCREW,MACH.,TRUSS HEAD,M3X5 バインド ネジ	
32	FB2 – 0314 – 000		1	HOLDER, ATR ATR ホルダ	
33	FB2 – 0316 – 000		1	WINDOW, ATR ATR マド	
34	FB2 – 0317 – 000		1	SHEET, INSULATION ゼツエン シート	
35	FB2 – 0318 – 000		1	SHEET, SHIELD シールド シート	
36	FB2 – 0319 – 000		1	SHEET, TEFLON テフロン シート	
37	FB2 – 0320 – 000		1	TAPE, DOUBLE – SIDED リョウメン テープ	
38	FB2 – 0321 – 000		1	PACKING, ATR ATR パッキン	
39	FB2 – 0323 – 000		1	COVER, PCB PCB カバー	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
640 – 40	FG5 – 9393 – 000		1	DEVELOPING UNIT BIAS PCB ASS'Y ゲンゾウ バイアス カイロ キバン	
40A	FF3 – 0263 – 000		1	CABLE, 1 ケーブル (1)	W1
40B	FF2 – 9781 – 000		1	CABLE, 2 ケーブル (2)	W2
40C	FH4 – 9178 – 000		1	RESISTOR, 30MOHM, 0.13W テイコウ	R1
40D	VC9 – 5015 – 000		1	CAPACITOR, 0.01UF, 2KV コンデンサ	C2
40E	VC9 – 5301 – 000		1	CAPACITOR, 10PUF, 2KV コンデンサ	C1
40F	WA1 – 0396 – 000		1	DIODE, SHV – 03 ダイオード	D1
40G	WA1 – 0396 – 000		1	DIODE, SHV – 03 ダイオード	D2
41	FB2 – 0325 – 000		1	SPACER, ATR WINDOW ATR マド スペーサ	
42	FN5 – 4004 – 000		1	MIRROR, ATR ATR ハンシャ ミラー	
43	FB2 – 9938 – 000		1	SHEET, PROTECTIVE ホゴ シート	
44	FF2 – 9091 – 000		1	CABLE, MAGNET POSITIONING キョク キメ バン ケーブル	MR59 – 64
45	FB2 – 0328 – 000		1	SHEET, COVER カバー シート	
46	XA9 – 0033 – 000		1	SCREW, M3X5 ネジ	
47	NPN		RF	COLOR TONER SENSOR PCB ASS'Y カラー トナー ノウド ケンチ カイロ キバン	
501	XB1 – 2300 – 402		AR	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
502	XB4 – 7300 – 809		3	SCREW,TAPPING,TRUSS HEAD,M3X8 バインド タッピン ネジ	
503	XD2 – 1100 – 322		1	RING,E E リング	
504	XD2 – 1100 – 502		6	RING,E E リング	
505	XD2 – 2100 – 802		2	RING,GRIP グリップ リング	
506	XB1 – 2300 – 409		4	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	

FIGURE 642 DEVELOPING ASSEMBLY (BK)
現像器 (BK)

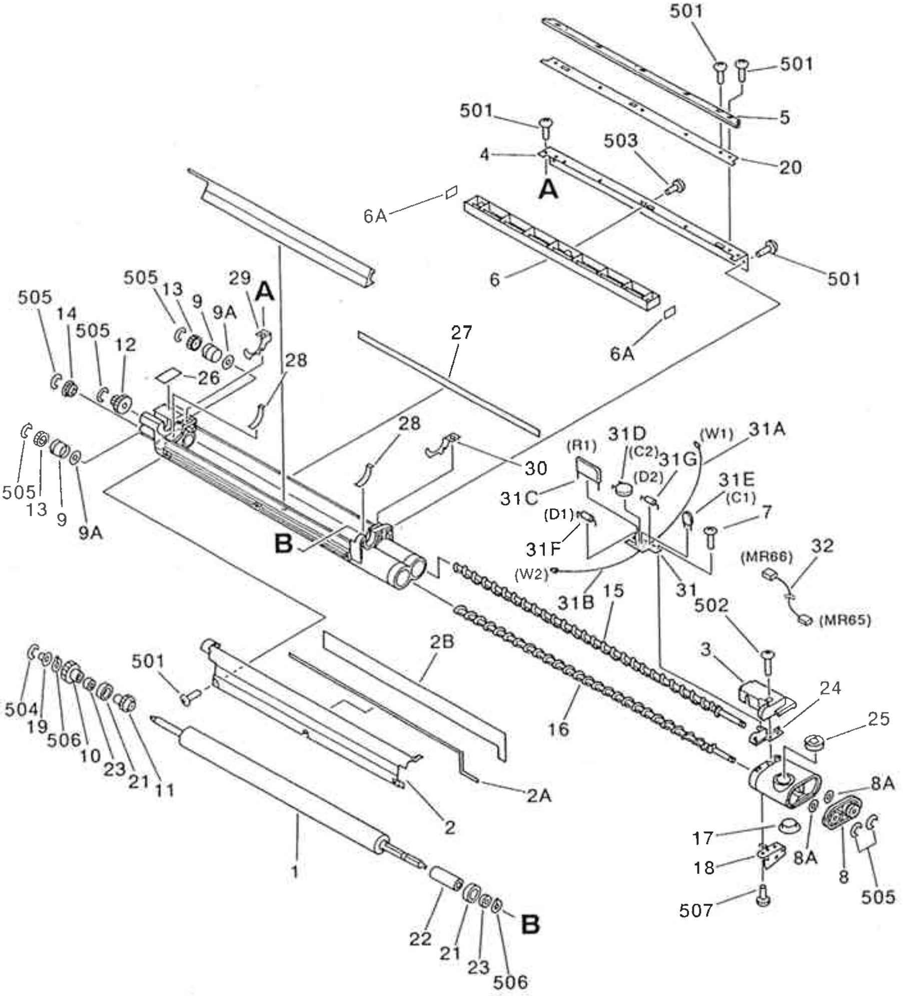
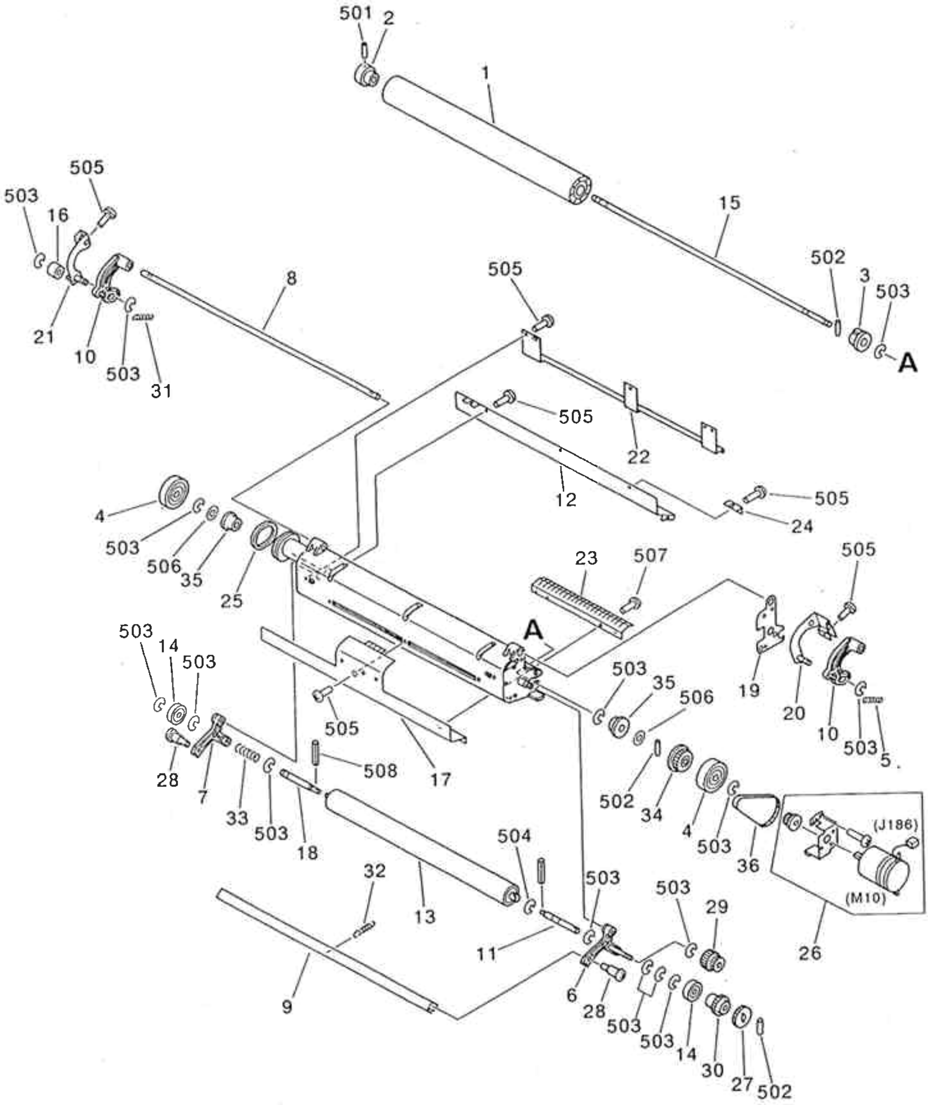

501
501
501
5
503
4
20
A
6A
501
6
6A
505
13
9
9A
29
A
505
14
505
12
26
28
27
28
30
31D
(R1)
(C2)
(W1)
31A
31G
(D2)
31E
(C1)
31C
7
(D1)
31F
(W2)
32
(MR66)
505
13
9
9A
B
31B
15
31
502
(MR65)
2B
3
501
24
25
504
19
506
10
23
21
11
16
2A
8A
2
17
8A
1
18
8
505
507
22
21
23
506
B

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
642 –	FG5 – 2594 – 110		1	DEVELOPING ASSEMBLY ゲンゾウキ	**BLACK**
1	FB2 – 0265 – 000		1	CYLINDER, DEVELOPING ゲンゾウ シリンダ	
2	FF5 – 2340 – 000		1	COVER, SLEEVE, BLACK スリーブ カバー (クロ)	
2A	FB2 – 0297 – 000		1	PLATE, SHIELD シールド バン	
2B	FB2 – 9894 – 000		1	SHEET, INSULATING ゼツエン シート	
3	FB2 – 0302 – 000		1	COVER, TERMINAL, BLACK デンキョク カバー (クロ)	
4	FB2 – 0310 – 020		1	SUPPORT, BLADE, BLACK ブレード シバン (クロ)	
5	FB2 – 0313 – 000		1	COVER, BLADE, BLACK ブレード カバー (クロ)	
6	FF5 – 1990 – 000		1	MOUNT, CARRIER キャリア カエシ	
6A	FB2 – 0322 – 000		2	PACKING, CARRIER キャリア カエシ パッキン	
7	XA9 – 0033 – 000		1	SCREW, M3X5 ネジ	
8	FF5 – 2001 – 020		1	BUSHING ブッシング	
8A	FB2 – 8903 – 000		2	RING, MAGNET マグネット リング	
9	FF5 – 2002 – 000		2	BUSHING ブッシング	
9A	FB2 – 8903 – 000		1	RING, MAGNET マグネット リング	
10	FS5 – 0655 – 000		1	GEAR, 24T 24T ギア	
11	FS5 – 0656 – 000		1	GEAR, 24T 24T ギア	
12	FS5 – 0657 – 000		1	GEAR, 16T/24T 16T/24T ギア	
13	FS5 – 0658 – 000		2	GEAR, 16T 16T ギア	
14	FS5 – 0659 – 000		1	GEAR, 16T 16T ギア	
15	FB2 – 0269 – 000		1	SCREW, 2 スクリュ (2)	
16	FB2 – 0268 – 000		1	SCREW, 1 スクリュ (1)	
17	FB2 – 0306 – 000		1	CAP, DEVELOPING ゲンゾウ キャップ	
18	FB2 – 0307 – 020		1	PLATE, STOP, DEVELOPING ゲンゾウ コテイ バン	
19	FB3 – 7681 – 000		1	SLIDER, SLEEVE スリーブ スライダ	
20	FB2 – 0308 – 000		1	BLADE ブレード	
21	FB2 – 0303 – 030		2	ROLLER, SPACER ツキアテ コロ	
22	FB2 – 0304 – 000		1	COLLAR, SLEEVE スリーブ カラー	
23	XG9 – 0219 – 000		2	BEARING, BALL ボール ベアリング	
24	FB2 – 0299 – 000		1	PLATE, TERMINAL キョクキメ バン	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
642 – 25	FB2 – 8706 – 030		1	SEAL, PIPE ホキュウグチ シール	
26	FB2 – 0329 – 000		1	SHEET, COVER カバー シート	
27	FB2 – 0290 – 000		1	PACKING, COVER ケース パッキン	
28	FB2 – 0279 – 000		2	SEAL, MAGNET シール マグネット	
29	FB2 – 0278 – 000		1	PLATE, MAGNET, REAR マグネット プレート (ウシロ)	
30	FB2 – 0277 – 000		1	PLATE, MAGNET, FRONT マグネット プレート (マエ)	
31	FG5 – 3091 – 000		1	DEVELOPING UNIT BIAS PCB ASS'Y ゲンゾウ バイアス カイロ キバン	
31A	FF2 – 9780 – 000		1	CABLE, 1 ケーブル (1)	W1
31B	FF2 – 9781 – 000		1	CABLE, 2 ケーブル (2)	W2
31C	FH4 – 9178 – 000		1	RESISTOR, 30MOHM, 0.13W テイコウ	R1
31D	VC9 – 5015 – 000		1	CAPACITOR, 0.01UF, 2KV コンデンサ	C2
31E	VC9 – 5301 – 000		1	CAPACITOR, 10PUF, 2KV コンデンサ	C1
31F	WA1 – 0396 – 000		1	DIODE, SHV – 03 ダイオード	D1
31G	WA1 – 0396 – 000		1	DIODE, SHV – 03 ダイオード	D2
32	FF2 – 9092 – 000		1	CABLE, MAGNET POSITIONING キョク キメ バン ケーブル	MR65,66
501	XB1 – 2300 – 402		AR	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
502	XB1 – 2300 – 602		5	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XB4 – 7300 – 809		3	SCREW,TAPPING,TRUSS HEAD,M3X8 バインド タッピン ネジ	
504	XD2 – 1100 – 322		1	RING,E E リング	
505	XD2 – 1100 – 502		6	RING,E E リング	
506	XD2 – 2100 – 802		2	RING,GRIP グリップ リング	
507	XB1 – 2300 – 409		4	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	

FIGURE 710 TRANSFER CLEANING ASSEMBLY
転写クリーナ部



501
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503
16
15
8
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502
3
503
A
21
10
503
31
505
22
12
505
24
4
503
506
35
25
23
507
505
A
19
20
10
503
5
503
14
503
505
503
35
506
28
7
33
503
508
18
17
502
34
4
503
36
(J186)
(M10)
26
504
13
32
503
11
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29
9
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28
503
503
14
30
27
502

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
710 –	FG5 – 4707 – 130		1	TRANSFER CLEANING ASSEMBLY テンシャ クリーナ ブ	
1	FA4 – 8874 – 000		1	ROLLER, DRUM CLEANING クリーニング ローラ	
2	FA5 – 9165 – 000		1	RETAINER, BRUSH, FRONT ブラシ オサエ (マエ)	
3	FA5 – 9166 – 000		1	RETAINER, BRUSH, REAR ブラシ オサエ (ウシロ)	
4	FB2 – 0692 – 000		2	ROLLER ツキアテ コロ	
5	FS6 – 2162 – 000		1	SPRING, TENSION ヒッパリ バネ	
6	FB2 – 0652 – 000		1	ARM, ROLLER, FRONT ローラ アーム (マエ)	
7	FB2 – 0653 – 000		1	ARM, ROLLER, REAR ローラ アーム (ウシロ)	
8	FB2 – 0654 – 000		1	SHAFT, CLEANING クリーナ ジク	
9	FB2 – 0655 – 000		1	CROSSMEMBER, ROLLER ARM ローラ アーム ステイ	
10	FB2 – 0656 – 000		2	ARM, LIFTING カアツ アーム	
11	FF5 – 2063 – 000		1	SHAFT, DRIVE クドウ ジク	
12	FB3 – 1455 – 020		1	COVER, TRANSFER CLEANING テンシャ クリーナ カバー	
13	FB2 – 0661 – 000		1	ROLLER, OIL EMPLOY オイル トリ ローラ	
14	FB2 – 0662 – 000		2	ROLLER ツキアテ コロ	
15	FB2 – 0665 – 020		1	SHAFT, BRUSH ブラシ ジク	
16	FB2 – 0666 – 000		1	ROLLER, ARM レバー コロ	
17	FB2 – 0667 – 000		1	SUPPORT, SPRING バネ カケ ダイ	
18	FB2 – 0670 – 000		1	SHAFT, ROLLER ローラ ジク	
19	FB2 – 0672 – 000		1	PLATE, CONTINUITY ドウツウ バン	
20	FF5 – 2062 – 000		1	LEVER ヨウドウ レバー	
21	FF5 – 2064 – 000		1	LEVER, CLEANING クリーナ レバー	
22	FF5 – 4032 – 030		1	SCRAPER, BRUSH 1 ブラシ スクレーパ (1)	
23	FB3 – 7680 – 000		2	RETAINER, GROUNDING PLATE アース バン オサエ	
24	FB2 – 9135 – 000		1	PLATE, GROUNDING アース バン	
25	FB2 – 0668 – 000		1	SEAL, DUCT ダクト シール	
26	FG5 – 8298 – 000		1	MOTOR, DC24V モータ	M10 J186
27	FS1 – 0708 – 000		1	GEAR, 20T 20T ギア	
28	FS1 – 9004 – 000		2	SCREW,STEPPED,M4 ダンビス	
29	FS5 – 0679 – 000		1	GEAR, 16T/30T 16T/30T ギア	

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
710 –	30	FS5 – 0680 – 000		1	GEAR, 30T 30T ギア	
	31	FS5 – 2568 – 000		1	SPRING, TENSION ヒッパリ バネ	
	32	FS5 – 2588 – 000		1	SPRING, TENSION ヒッパリ バネ	
	33	FS5 – 2589 – 000		1	SPRING, COMPRESSION アッシュク バネ	
	34	FS5 – 3253 – 000		1	PULLEY, 40T 40T プーリ	
	35	XG9 – 0321 – 000		2	BEARING ベアリング	
	36	XF9 – 0430 – 000		1	BELT, TIMING, FLAT タイミング ベルト	
	501	XB6 – 2400 – 608		1	SETSCREW,M4X6 ロッカク アナツキ トメネジ	
	502	XD3 – 2200 – 122		3	PIN,DOWEL ヘイコウ ピン	
	503	XD2 – 1100 – 502		AR	RING,E E リング	
	504	XD2 – 1100 – 322		1	RING,E E リング	
	505	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
	506	XD1 – 1106 – 212		2	SHIM ヒョウジュン ワッシャ	
	507	XB1 – 2300 – 409		4	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
	508	XD3 – 1200 – 082		1	PIN,SPRING スプリング ピン	

FIGURE 770 WASTE TONER ASSEMBLY
廃トナー箱部

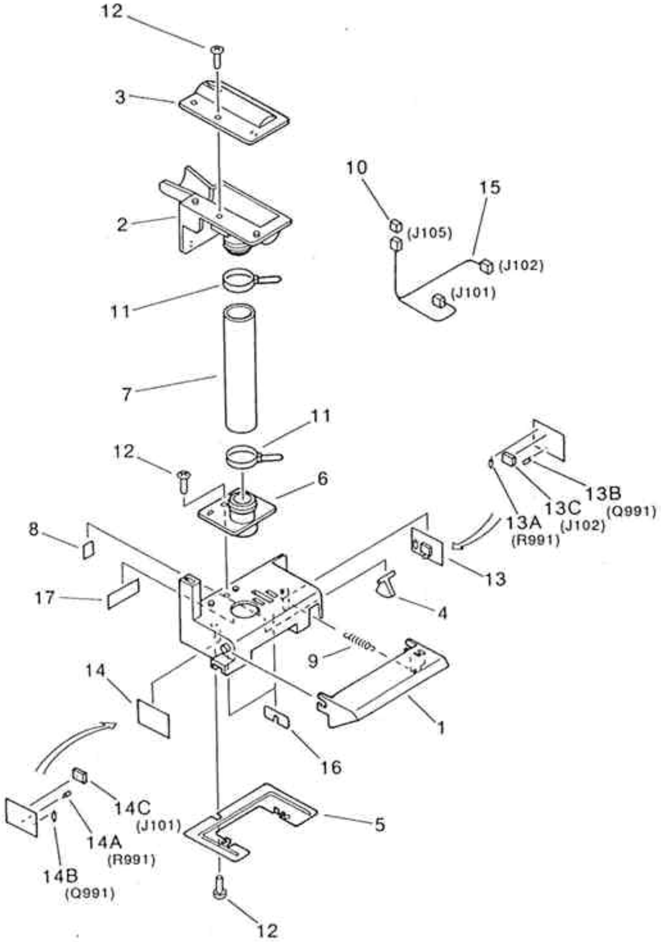
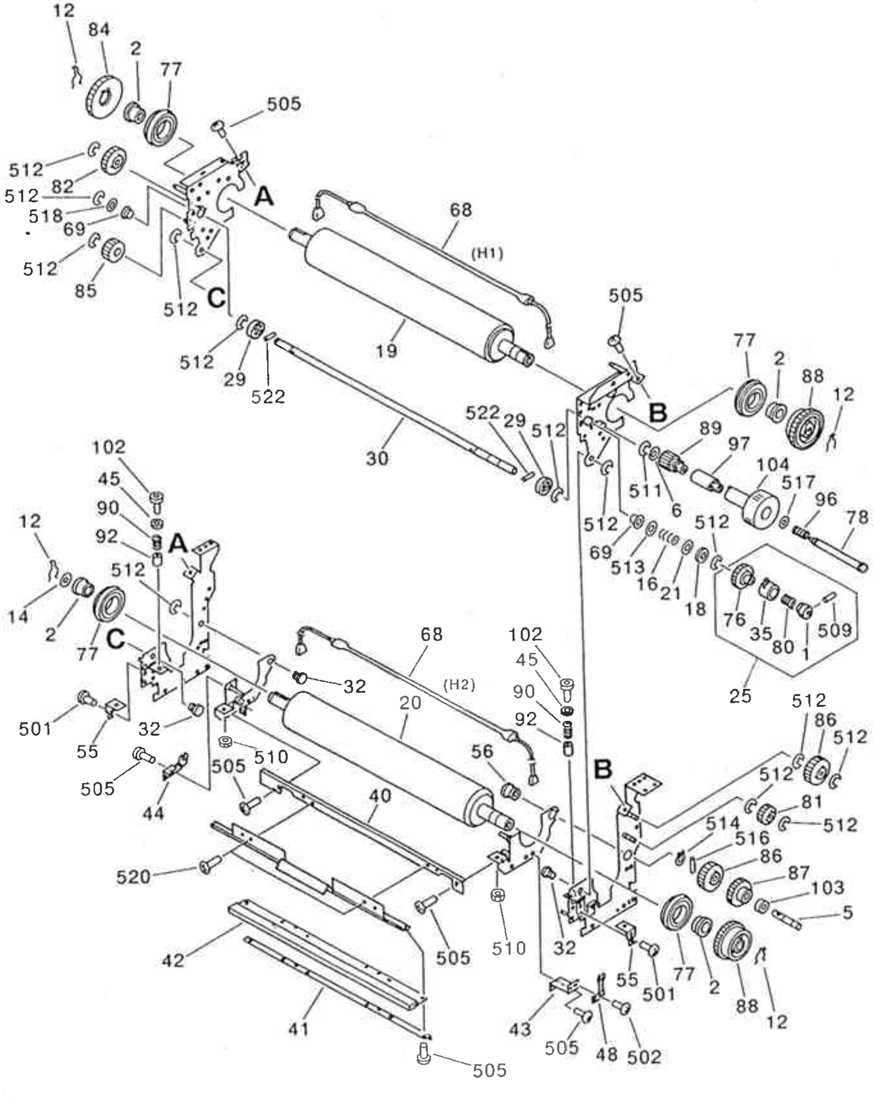

12
3
2
11
7
11
12
6
8
17
14
14C
(J101)
14A
(R991)
14B
(Q991)
5
12
16
1
9
4
13
13A
(R991)
13C
(J102)
13B
(Q991)
10
(J105)
15
(J102)
(J101)

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
770 –	FG5 – 2612 – 000		1	WASTE TONER ASSEMBLY ハイトナー バコ ブ	
1	FB2 – 0467 – 000		1	COVER, MOVABLE カドウ カバー	
2	FB2 – 0468 – 000		1	COVER, LOWER デグチ カバー (シタ)	
3	FB2 – 0469 – 000		1	COVER, UPPER デグチ カバー (ウエ)	
4	FB2 – 0470 – 000		1	PLATE, BLANKING メカクシ バン	
5	FB2 – 0471 – 000		1	COVER, LOWER バンキン カバー (シタ)	
6	FB2 – 0472 – 000		1	CONNECTOR, TUBE チューブ ウケ	
7	FB2 – 0473 – 000		1	TUBE チューブ	
8	FB2 – 0475 – 000		1	CUSHION, 2 シール (2)	
9	FS3 – 2433 – 000		1	SPRING, TENSION ヒツパリ バネ	
10	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	J105
11	WT2 – 0088 – 000		2	TIE, CABLE ソクセン バンド	
12	FC1 – 6854 – 000		4	SCREW, M4X8 Pタイト ネジ	
13	FG2 – 0152 – 000		1	WASTE TONER SENSOR ASSEMBLY, 1 ハイ トナー ケンチ ブ (ハッコウ)	
13A	VR1 – 1141 – 121		1	RESISTOR, 120 OHM, 1/4W テイコウ	R991
13B	WG1 – 0562 – 000		1	LED, TLN110 LED	Q991
13C	WS3 – 0613 – 000		1	CONNECTOR, 2P コネクタ	J102
14	FG2 – 0153 – 000		1	WASTE TONER SENSOR ASSEMBLY, 2 ハイ トナー ケンチ ブ (ジュコウ)	
14A	VR1 – 1141 – 394		1	RESISTOR, 390KOHM, 1/4W テイコウ	R991
14B	WG3 – 0103 – 000		1	PHOTO – TRANSISTOR, TPS611 フォト トランジスタ	Q991
14C	WS3 – 0531 – 000		1	PIN ASSEMBLY 13P ピン アセンブリ	J101
15	FG5 – 3117 – 000		1	CABLE, WASTE TONER ハイトナー タバセン	J101,102,105
16	FA5 – 9326 – 000		2	SEAL, 1 シール (1)	
17	FB2 – 0474 – 000		1	CUSHION, 1 シール (1)	

FIGURE 810 FIXING ASSEMBLY (1/3)
定着器 (1/3)


12
84
2
77
505
512
82
512
518
69
512
85
512
A
C
68
(H1)
19
512
29
522
30
505
77
2
88
12
B
522
29
512
89
97
104
517
96
78
511
6
512
69
513
16
21
18
512
76
35
80
1
509
25
102
45
90
92
A
12
512
14
2
77
C
501
55
32
32
505
44
68
(H2)
20
510
505
40
520
42
41
505
505
510
32
56
102
45
90
92
B
512
86
512
512
81
512
514
516
86
87
103
5
77
2
88
12
55
501
43
505
48
502

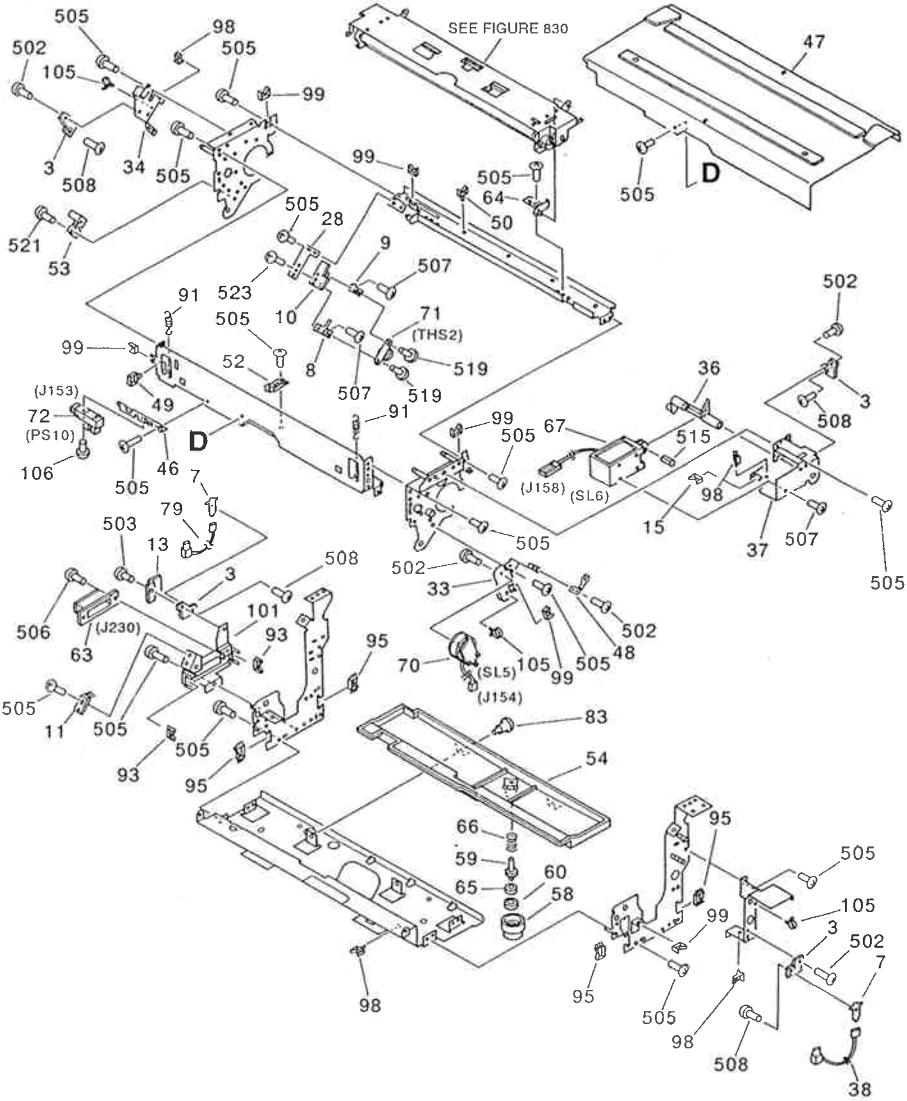
NOTE 1 : This assembly includes the assemblies shown in Figure 375, 820 and 830.

NOTE 2 : This assembly does not include the part shown with key No. 24, 39.

注 1 ： このユニットは、 Figure 375, 820, 830のユニットを含みます。

注 2 ： このユニットに、 Key No. 24, 39の部品は含まれません。

FIGURE 810 FIXING ASSEMBLY ($^2/_3$)
定着器 ($^2/_3$)



505
98
502
505
105
99
3
508
34
505
521
53
SEE FIGURE 830
47
505
D
99
505
64
50
505
28
9
507
523
10
91
505
71
(THS2)
99
52
8
519
507
519
49
91
(J153)
72
(PS10)
46
D
106
505
502
3
508
36
99
505
67
515
(J158)
(SL6)
98
15
37
507
505
505
7
79
503
13
508
3
101
93
506
(J230)
63
502
33
502
48
505
99
105
70
(SL5)
(J154)
95
505
11
505
505
93
95
83
54
66
59
65
60
58
98
95
505
105
99
3
502
7
95
505
98
508
38

FIGURE 810 FIXING ASSEMBLY ($^3/_3$)
定着器 ($^3/_3$)

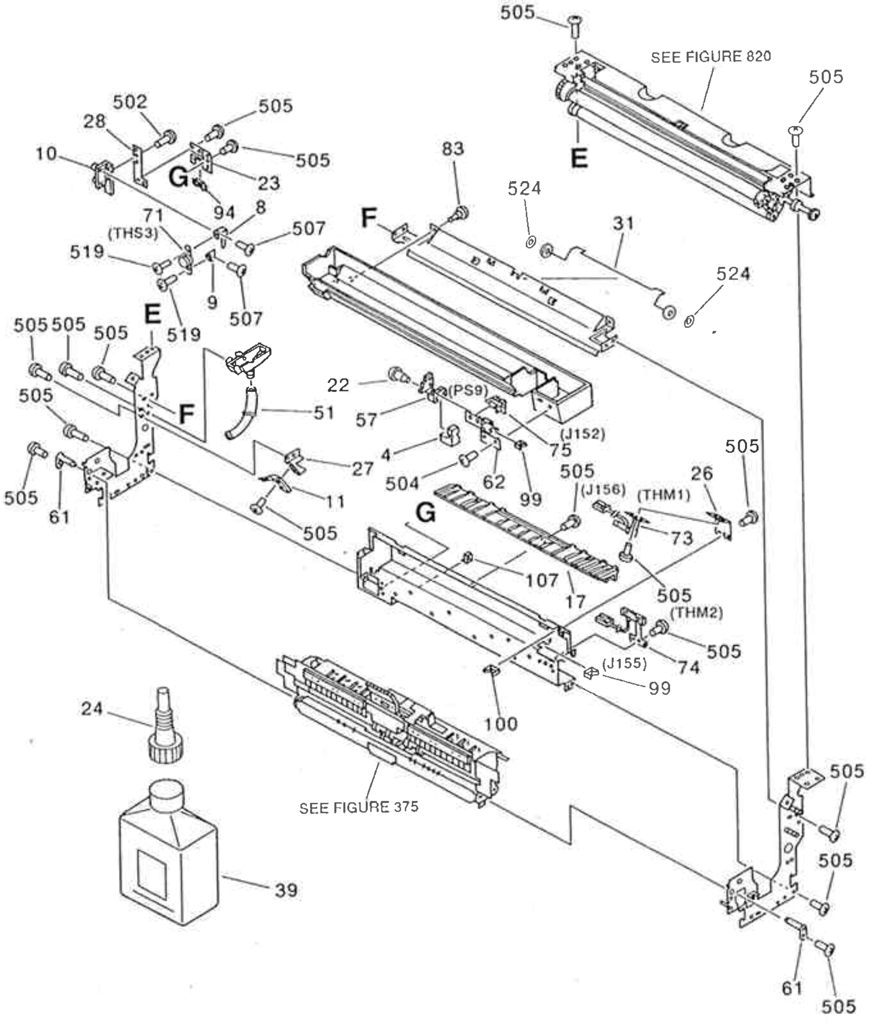

505
SEE FIGURE 820
505
E
502
505
28
505
10
G
23
83
524
94
8
F
71
(THS3)
507
31
519
524
9
507
505 505
505
E
519
22
(PS9)
51
F
505
57
(J152)
75
4
27
505
504
62
505
26
505
505
11
99
(J156)
(THM1)
61
G
73
505
505
107
17
505
(THM2)
505
74
(J155)
99
24
100
SEE FIGURE 375
505
39
505
61
505

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
810 –	FG5 – 5602 – 370		1	FIXING ASSEMBLY テイチャク キ	100V SEE NOTE 1
	FG5 – 5603 – 370		1	FIXING ASSEMBLY テイチャク キ	115/120V SEE NOTE 1
	FG5 – 5604 – 370		1	FIXING ASSEMBLY テイチャク キ	220V EXCEPT PFE 240V SEE NOTE 1
	FG5 – 7128 – 230		1	FIXING ASSEMBLY テイチャク キ	220V PFE SEE NOTE 1
1	FA2 – 5606 – 000		1	DRUM, CLUTCH DRIVEN バネウケ カナグ	
2	FA3 – 0652 – 000		4	BUSHING ダンネツ ブッシュ	
3	FA5 – 0966 – 000		4	MOUNT, SPRING デンキョク イタバネ ダイ	
4	FA5 – 8777 – 000		1	FLOAT フロート	
5	FB2 – 8867 – 000		1	SHAFT 2 レン ジク	
6	FB1 – 8512 – 000		1	SHIM ナイロン ワッシャ	
7	FA5 – 8805 – 000		2	TERMINAL, HEATER デンキョク (ヒータ)	
8	FB2 – 8725 – 000		2	TERMINAL, THERMISTOR, LEFT サーミスタ デンキョク (ヒダリ)	
9	FB2 – 8724 – 000		2	TERMINAL, THERMISTOR, RIGHT サーミスタ デンキョク (ミギ)	
10	FA5 – 8816 – 000		2	MOUNT, THERMISTOR サーミスタ ダイ	
11	FB2 – 8879 – 000		2	PLATE, STATIC CHARGE ELI. ローラ ジョデン バリ	
12	FA6 – 0216 – 020		4	PIN, RETAINING ヌケ ドメ	
13	FA6 – 2284 – 000		1	PLATE, PROTECT デンキョク ホゴバン	
14	FA9 – 2643 – 000		1	COLLAR カラー	
15	WT2 – 5056 – 000		1	CLIP, CABLE エッジ サドル	
16	FS6 – 2160 – 000		1	SPRING, COMPRESSION アッシュク バネ	
17	FB2 – 1075 – 000		1	GUIDE イリグチ ガイド	
18	FS5 – 6362 – 000		1	STOPPER, THRUST スラスト ストッパ	
19	FB2 – 1080 – 000		1	ROLLER, UPPER ウエ ローラ	
20	FB2 – 1084 – 000		1	ROLLER, LOWER シタ ローラ	
21	FS5 – 6363 – 000		1	WASHER ワッシャ	
22	FS5 – 9224 – 000		1	SCREW,STEPPED,M4 ダンビス	
23	FB2 – 1091 – 000		1	MOUNT, THERMOSWITCH, LOWER サーモスイッチ ダイ (シタ)	
24	FB3 – 5849 – 000		1	FUNNEL ホキュウ グチ	SEE NOTE 2
25	FG5 – 7343 – 020		1	CLEANING CAM CLUTCH ASSEMBLY クリーニング カム クラッチ ブ	

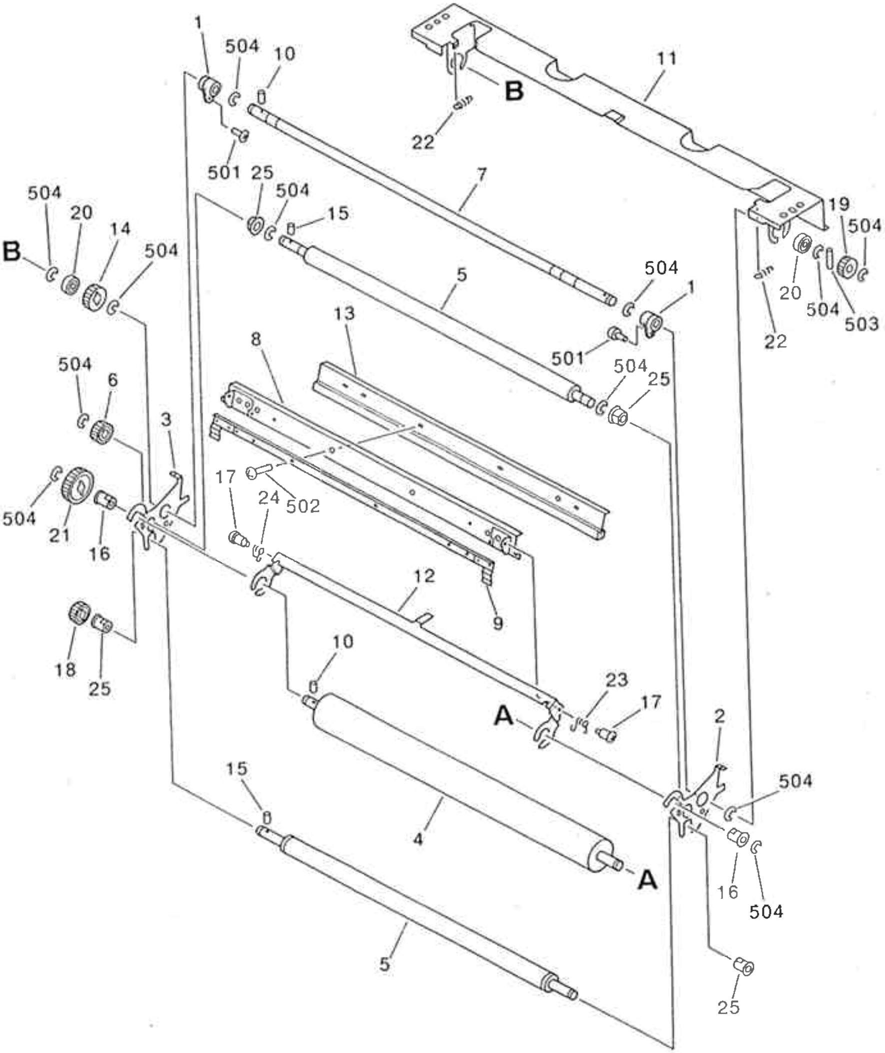
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
810 – 26	FB2 – 1094 – 000		1	MOUNT, THERMOSWITCH, UPPER サーモスイッチ ダイ（ウエ）	
27	FB2 – 1096 – 000		1	PLATE, STATIC CHARGE ジョデンシン ダイ	
28	FB2 – 1100 – 020		2	HOLDER, THERMOSWITCH サーモスイッチ ホルダ	
29	FB2 – 1102 – 000		2	CAM, FIXING UNIT CLEANING テイチャク クリーナ カム	
30	FB2 – 1103 – 020		1	SHAFT, CAM カム ジク	
31	FF5 – 2368 – 020		1	ROWEL ハクシャ	
32	FB2 – 1105 – 000		3	SPINDLE カイテン ジク	
33	FB2 – 1106 – 000		1	SUPPORT, HEATER, UPPER, FRONT ウエ ヒータ シバン（マエ）	
34	FB2 – 1107 – 000		1	SUPPORT, HEATER, UPPER, REAR ウエ ヒータ シバン（ウシロ）	
35	FB2 – 1108 – 030		1	RING, RATCHET, RIGHT ミギ セイギョ カン	
36	FB2 – 8864 – 000		1	LEVER, SOLENOID ソレノイド レバー	
37	FB2 – 8865 – 000		1	MOUNT, SOLENOID ソレノイド ダイ	
38	FG5 – 3177 – 030		1	HEATER CABLE, LOWER シタ ヒータ ソクセン	
39	FG5 – 3918 – 050		1	OIL SILICONE S400 シリコン オイル S400	SEE NOTE 2
40	FB2 – 1119 – 020		1	MOUNT, BLADE ブレード ダイ	
41	FB2 – 1120 – 020		1	PLATE, BLADE ブレード オサエ	
42	FB3 – 2047 – 000		1	BLADE ブレード	
43	FB2 – 1122 – 000		1	MOUNT, HEATER, LOWER, FRONT シタ ヒータ シバン（マエ）	
44	FB2 – 1123 – 000		1	MOUNT, HEATER, LOWER, REAR シタ ヒータ シバン（ウシロ）	
45	FB2 – 1125 – 000		2	WASHER ザガネ	
46	FB2 – 1183 – 000		1	MOUNT, SENSOR センサ ダイ	
47	FB2 – 8869 – 020		1	COVER, INSULATION ダンネツ カバー	EXCEPT KOREAN
	FC2 – 3084 – 000		1	COVER, INSULATION ダンネツ カバー	KOREAN
48	FB2 – 1186 – 000		2	HOLDER, HEATER ヒータ ホルダ	
49	WT2 – 5222 – 000		2	HOLD, CABLE ケーブル オサエ	
50	WT2 – 5232 – 000		11	CLAMP, CABLE コード オサエ	
51	FB2 – 1189 – 000		1	TUBE, 1 チューブ (1)	
52	FB2 – 1374 – 000		1	HOLDER, CATCH キャッチ ホルダ	
53	FB2 – 1376 – 000		1	GUIDE, CABLE ケーブル ガイド	
54	FB3 – 1440 – 020		1	PAN, OIL オイル パン	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
810 – 55	FB2 – 6284 – 000		2	PLATE, LIFTING カアツ バン	
56	FF2 – 2853 – 000		1	COLLAR カラー	
57	FF2 – 2979 – 000		1	LEVER, FLOAT フロート レバー	
58	FB2 – 1151 – 000		1	CASE, VALVE バルブ ケーシング	
59	FB2 – 1152 – 000		1	SHAFT, VALVE バルブ ジク	
60	FB2 – 1153 – 000		1	SEAL, 1 バルブ シール (1)	
61	FF5 – 2114 – 000		2	PLATE, HINGE ヒンジ バン	
62	FB2 – 1099 – 000		1	MOUNT, FLOAT フロート ダイ	
63	FG5 – 3104 – 000		1	FIXING CABLE テイチャク ソクセン	100V J230
	FG5 – 3105 – 000		1	FIXING CABLE テイチャク ソクセン	115/120/220/240V J230
64	FF5 – 2269 – 000		1	PLATE, SUPPORT, FRONT シバン (マエ)	
65	FB2 – 1154 – 000		1	SEAL, 2 バルブ シール (2)	
66	FS5 – 2546 – 000		1	SPRING, COMPRESSION アッシュク バネ	
67	FH7 – 5446 – 000		1	SOLENOID, DC ソレノイド	SL6 J158
68	FH7 – 4408 – 000		2	HEATER, 100V 500W ハロゲン ヒータ	100V H1,2
	FH7 – 4409 – 000		2	HEATER, 115V 500W ハロゲン ヒータ	115/120V H1,2
	FH7 – 4410 – 000		2	HEATER, 220V 500W ハロゲン ヒータ	220/240V H1,2
69	FS1 – 1462 – 000		2	BUSHING ブッシング	
70	FH7 – 5478 – 000		1	SOLENOID, DC24V ソレノイド	SL5 J154
71	FH7 – 6201 – 000		2	THERMOSTAT, 230° C サーモスタット	THS2,3
72	FH7 – 7306 – 000		1	PHOTO – INTERRUPTER, S7G37 フォトインタラプタ	PS10 J153
73	FH7 – 7308 – 000		1	THERMISTOR, 250° C サーミスタ アセンブリ	THM1 J156
74	FH7 – 7309 – 000		1	THERMISTOR, 250° C サーミスタ アセンブリ	THM2 J155
75	FH7 – 7312 – 000		1	PHOTO – INTERRUPTER フォトインタラプタ	PS9 J152
76	FS1 – 0701 – 000		1	GEAR, 30T 30T ギア	
77	FS1 – 1335 – 000		4	BEARING, ROLLER ローラ ベアリング	
78	FS5 – 9208 – 000		1	PIN, GRIP ツマミ ジク	
79	FG5 – 3176 – 030		1	HEATER CABLE, UPPER ウエ ヒータ ソクセン	
80	FS1 – 2651 – 000		1	SPRING, TORSION ネジリ バネ	
81	FS2 – 0441 – 000		1	GEAR, 28T 28T ギア	

FIGURE & KEY NO.		PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
810 –	82	FS2 – 0811 – 000		1	GEAR 32T 32T ギア	
	83	FS2 – 9012 – 000		AR	SCREW,STEPPED,M2.2 ダンビス	
	84	FS3 – 0484 – 020		1	GEAR, 54T 54T ギア	
	85	FS5 – 0703 – 000		1	GEAR, 28T 28T ギア	
	86	FS5 – 0724 – 000		2	GEAR, 32T 32T ギア	
	87	FS5 – 0725 – 000		1	GEAR, 32T 32T ギア	
	88	FS6 – 0625 – 000		2	GEAR, 54T 54T ギア	
	89	FS5 – 0684 – 000		1	GRIP ツマミ ギア	
	90	FS5 – 2544 – 000		2	SPRING, COMPRESSION アッシュク バネ	
	91	FS5 – 2584 – 000		2	SPRING, TENSION ヒッパリ バネ	
	92	FS5 – 6245 – 000		2	COLLAR カラー	
	93	WT2 – 0136 – 000		2	CLIP, CABLE エッジ サドル	
	94	WT2 – 0204 – 000		1	CLIP, CABLE エッジ サドル	
	95	WT2 – 0241 – 000		4	CLIP, CABLE エッジ サドル	
	96	FS2 – 2784 – 000		1	SPRING, COMPRESSION アッシュク バネ	
	97	FB2 – 4461 – 000		1	JOINT ジョイント	
	98	WT2 – 0495 – 000		15	CLAMP, CABLE ケーブル クランプ	
	99	WT2 – 5300 – 000		AR	CLIP, CABLE エッジ サドル	
	100	WT2 – 5231 – 000		4	CLIP, CABLE エッジ サドル	
	101	FB2 – 1181 – 000		1	MOUNT, CONNECTOR コネクタ ダイ	
	102	XA9 – 0719 – 000		2	BOLT, HEX SOCKET, M5X35 ロッカク アナツキ ボルト	
	103	FS5 – 1505 – 000		1	BEARING, BALL ボール ベアリング	
	104	FB1 – 7215 – 000		1	KNOB, FIXING テイチャク ツマミ	
	105	WT2 – 0433 – 000		6	CLAMP, CABLE ソクセン バンド	
	106	XA9 – 0679 – 000		2	SCREW,MACH.,FLAT HEAD,M3X4 ヒラコ ネジ	
	107	WT2 – 0262 – 000		8	CLIP, CABLE ロッキング ワイヤ サドル	
	501	XB1 – 2400 – 409		4	SCREW,MACH.,TRUSS HEAD,M4X4 バインド ネジ	
	502	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
	503	XB1 – 2300 – 809		1	SCREW,MACH.,TRUSS HEAD,M3X8 バインド ネジ	
	504	XB2 – 4400 – 805		3	SCREW,W/WASHER,M4X8 バネツキ ナベ ネジ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
810 – 505	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
506	XB1 – 2400 – 809		2	SCREW,MACH.,TRUSS HEAD,M4X8 バインド ネジ	
507	XB6 – 7300 – 405		AR	SCREW,TP,M3X4 TP ネジ	
508	XB2 – 2300 – 605		4	SCREW,W/WASHER,M3X6 バネツキ ナベ ネジ	
509	XB6 – 2400 – 408		1	SETSCREW,M4X4 ロッカク アナツキ トメネジ	
510	XB7 – 2100 – 509		2	NUT,HEX,M5 ロッカク ナット	
511	XD2 – 1100 – 502		AR	RING,E E リング	
512	XD2 – 1100 – 642		AR	RING,E E リング	
513	XD1 – 1108 – 233		1	SHIM ヒョウジュン ワッシャ	
514	XD2 – 3100 – 142		1	RING,C,EXTERNAL C リング (ジクヨウ)	
515	XD3 – 1300 – 122		AR	PIN,SPRING スプリング ピン	
516	XD3 – 2200 – 162		1	PIN,DOWEL ヘイコウ ピン	
517	XD1 – 1106 – 235		1	SHIM ヒョウジュン ワッシャ	
518	XD1 – 1108 – 222		1	SHIM ヒョウジュン ワッシャ	
519	XB6 – 7300 – 609		4	SCREW,TP,M3X6 TP ネジ	
520	XB6 – 7400 – 609		2	SCREW,TP,M4X6 TP ネジ	
521	XB2 – 4300 – 605		2	SCREW,W/WASHER,M3X6 バネツキ ナベ ネジ	
522	XD3 – 2200 – 122		2	PIN,DOWEL ヘイコウ ピン	
523	XB1 – 2300 – 409		9	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
524	XD1 – 1101 – 539		2	SHIM ヒョウジュン ワッシャ	

FIGURE 820 FIXING OIL APPLY ASSEMBLY
定着器オイル塗布部

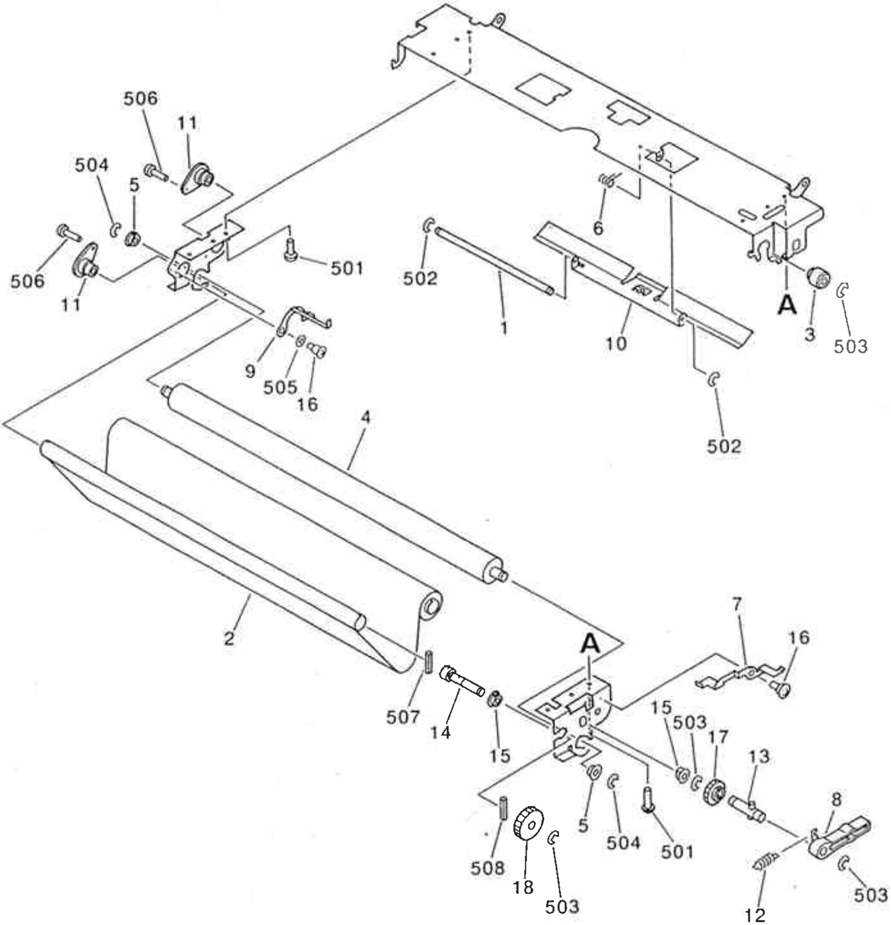

1
504
10
11
B
22
7
501
25
504
15
504
20
14
504
B
5
504
1
19
504
20
504
503
22
501
504
25
13
8
504
6
3
17
24
502
504
21
16
12
9
18
25
10
23
17
A
2
504
15
4
A
16
504
5
25

NOTE : This assembly is included in the assembly shown in Figure 810.

注 ： このユニットは、Figure 810のユニットに含まれます。

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
820 –	FG5 – 5607 – 040		1	FIXING OIL APPLY ASSEMBLY テイチャクキ オイル トフ ブ	SEE NOTE
1	FA4 – 9197 – 000		2	BUSHING ブッシング	
2	FB2 – 8874 – 000		1	PLATE, OIL APPLY, FRONT トフ ソクバン (マエ)	
3	FB2 – 8875 – 000		1	PLATE, OIL APPLY, REAR トツ ソクバン (ウシロ)	
4	FB2 – 1143 – 000		1	ROLLER, 1 トフ ローラ (1)	
5	FB2 – 8876 – 000		2	ROLLER, 2 トフ ローラ (2)	
6	FS6 – 0626 – 000		1	GEAR, 16T 16T ギア	
7	FB2 – 1146 – 000		1	SHAFT ヨウドウ ジク	
8	FF5 – 2364 – 000		1	PLATE, BLADE, 1 ブレード ダイ (1)	
9	FB2 – 8729 – 030		1	MOUNT, BLADE ブレード オサエ	
10	XD9 – 0108 – 000		2	PIN,DOWEL ヘイコウ ピン	
11	FB2 – 1379 – 020		1	PLATE, UPPER テン バン	
12	FB2 – 6269 – 000		1	PLATE, BLADE, 2 ブレード ダイ (2)	
13	FB2 – 6305 – 040		1	BLADE トフ ブレード	
14	FS5 – 0996 – 000		1	GEAR, 19T 19T ギア	
15	XD9 – 0103 – 000		2	PIN,DOWEL ヘイコウ ピン	
16	FS5 – 1509 – 000		2	BUSHING ブッシング	
17	FS1 – 9051 – 000		2	SCREW,STEPPED,M3X4 ダンビス	
18	FS6 – 0627 – 000		1	GEAR, 16T 16T ギア	
19	FS5 – 0995 – 000		1	GEAR, 20T 20T ギア	
20	XG9 – 0250 – 000		2	BEARING, BALL ボール ベアリング	
21	FS5 – 0701 – 000		1	GEAR, 28T 28T ギア	
22	FS5 – 2548 – 000		2	SPRING, TENSION ヒッパリ バネ	
23	FS5 – 2619 – 000		1	SPRING, TORSION ネジリ バネ	
24	FS5 – 2620 – 000		1	SPRING, TORSION ネジリ バネ	
25	FS5 – 1380 – 000		4	BUSHING ブッシング	
501	XB2 – 4400 – 805		2	SCREW,W/WASHER,M4X8 バネツキ ナベ ネジ	
502	XB1 – 2300 – 609		4	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
503	XD3 – 2200 – 122		1	PIN,DOWEL ヘイコウ ピン	
504	XD2 – 1100 – 642		AR	RING,E E リング	

FIGURE 830 FIXING ROLLER CLEANING ASSEMBLY
定着クリーナ部


506
11
504
5
506
11
501
502
1
6
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A
3
503
9
505
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502
4
2
7
16
A
507
14
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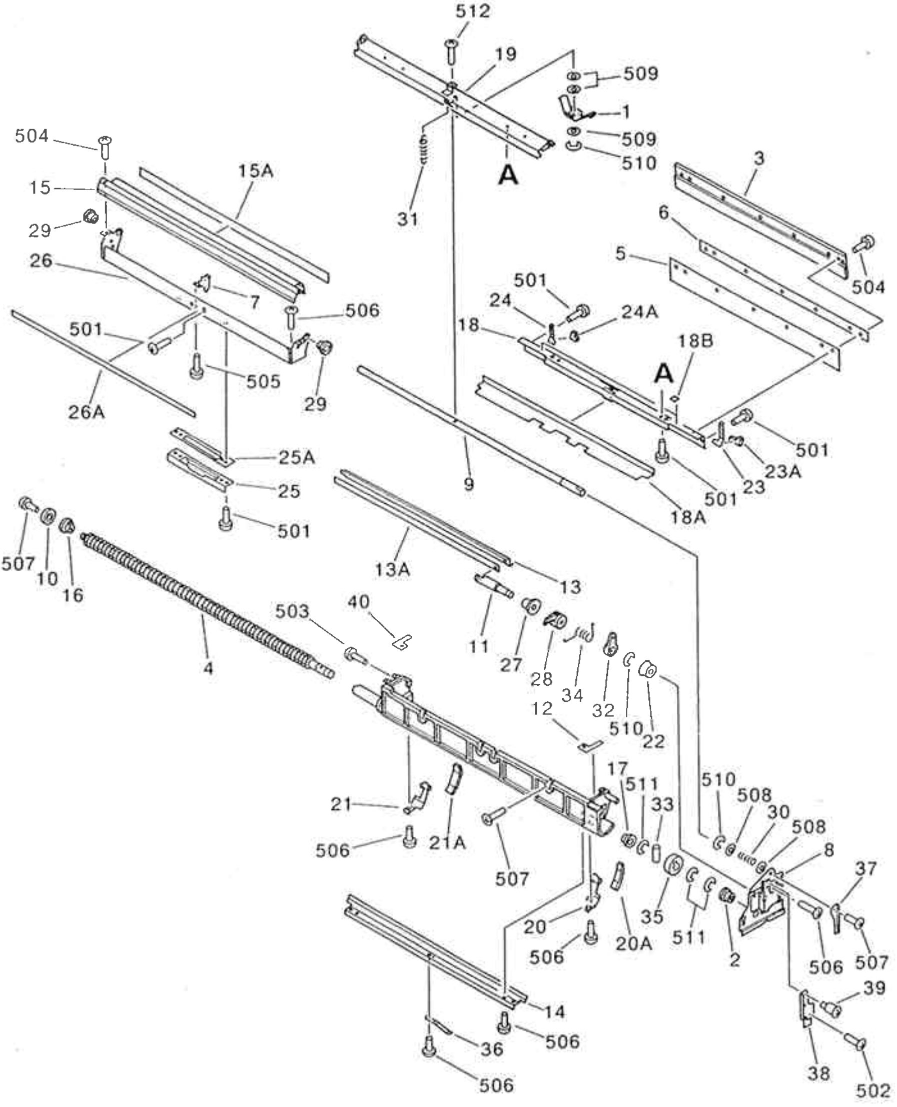
15
503
17
13
8
5
504
501
508
18
503
12
503

NOTE : This assembly is included in the assembly shown in Figure 810.

注 ： このユニットはFigure 810 のユニットに含まれます。

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
830 –	FG5 – 2692 – 050		1	FIXING ROLLER CLEANING ASS'Y テイチャク クリーナ ブ	SEE NOTE
1	FA5 – 2988 – 000		1	ROD, PLATE MOUNTING モドリ ボウシ ジク	
2	FB2 – 3482 – 000		1	CLEANING BELT, FIXING ROLLER ウェブ	
3	FB3 – 5192 – 000		1	BUSHING ブッシング	
4	FB1 – 8280 – 000		1	ROLLER, CLEANING ウェブ ローラ	
5	RS1 – 1054 – 000		2	BUSHING ブッシング	
6	FS5 – 2586 – 000		1	SPRING, TORSION ネジリ バネ	
7	FB2 – 1364 – 000		1	PLATE, SWING オクリ バン	
8	FB2 – 1366 – 020		1	ARM, ONE – WAY ワンウェイ アーム	
9	FB2 – 1368 – 000		1	LEVER, SENSOR センサ レバー	
10	FB2 – 1369 – 000		1	PLATE, BRAKE ブレーキ バン	
11	FB2 – 1371 – 000		2	HOLDER, CLEANING ROLLER ウェブ ジク	
12	FS5 – 2550 – 000		1	SPRING, TENSION ヒッパリ バネ	
13	FF5 – 2322 – 000		1	PIN ウェブ クドウ ジク	
14	FF5 – 2323 – 020		1	ROD, 1 ウェブ ジク (1)	
15	RS1 – 1016 – 000		2	BUSHING ブッシング	
16	FS1 – 9120 – 000		2	SCREW,STEPPED,M3 ダンビス	
17	FS5 – 0739 – 000		1	GEAR, 28T 28T ギア	
18	FS5 – 0740 – 000		1	GEAR, 40T 40T ギア	
501	XB1 – 2400 – 609		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
502	XD2 – 1100 – 322		2	RING,E E リング	
503	XD2 – 1100 – 502		4	RING,E E リング	
504	XD2 – 1100 – 642		2	RING,E E リング	
505	XD1 – 1104 – 122		1	SHIM ヒョウジュン ワッシャ	
506	XB2 – 4400 – 805		2	SCREW,W/WASHER,M4X8 バネツキ ナベ ネジ	
507	XD3 – 1200 – 102		1	PIN,SPRING スプリング ピン	
508	XD3 – 1200 – 142		1	PIN,SPRING スプリング ピン	

FIGURE 835 DRUM CLEANING ASSEMBLY
クリーナ部


512
19
509
1
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510
A
31
504
15
15A
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26
7
506
501
505
29
26A
3
6
504
5
501
24
24A
18
18B
A
501
23A
23
501
18A
9
25A
25
501
507
10
16
4
13A
13
11
27
28
34
32
510
22
503
40
12
21
506
21A
507
17
511
33
510
508
30
508
8
37
35
511
2
20
20A
506
506
507
39
14
506
36
506
38
502

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
835 –	FG5 – 5630 – 050		1	DRUM CLEANING ASSEMBLY クリーナ ブ	
1	FA5 – 1523 – 000		1	SPRING, LEAF イタ バネ	
2	FA9 – 2112 – 000		1	BUSHING ブッシング	
3	FB2 – 0350 – 000		1	BLADE, CLEANING クリーニング ブレード	
4	FB2 – 8951 – 000		1	FEED SCREW, TONER クリーナ スクリュ	
5	FB2 – 0356 – 000		1	SPACER, 2 スペーサ (2)	
6	FB2 – 0357 – 000		1	SPACER, 3 スペーサ (3)	
7	FB2 – 0365 – 000		1	HOOK, SPRING バネ カケ バン	
8	FB2 – 0367 – 000		1	PLATE, CLEANING, FRONT クリーナ シバン (マエ)	
9	FB2 – 0373 – 000		1	SHAFT, LEVER シテン ジク	
10	FB2 – 0375 – 000		1	COUPLING カップリング	
11	FB2 – 8960 – 000		1	SHAFT, ONE – WAY ワンウェイ ジク	
12	FB2 – 0386 – 000		1	SHEET, LOWER, FRONT シール	
13	FF5 – 4008 – 000		1	PLATE, WASTE TONER CONTAINER トナー カイシュウ イタ	
13A	FB2 – 0360 – 000		1	SHEET, WASTE TONER CONTAINER トナー カイシュウ シート	
14	FF5 – 3993 – 000		1	SWEEPER STRIP PLATE ASSEMBLY スクイ シート シバン	
15	FF5 – 3998 – 000		1	COVER, UPPER ウエ カバー イタ	
15A	FB2 – 8955 – 000		1	SHEET, UPPER COVER ウエ カバー シート	
16	FF5 – 2043 – 000		1	BUSHING ブッシング	
17	FF5 – 2131 – 000		1	BUSHING ブッシング	
18	FF5 – 3997 – 000		1	MOUNT, CLEANING BLADE ブレード ダイ	
18A	FB2 – 9121 – 000		1	SHEET, PARTITIONING シキリ シート	
18B	FB2 – 0382 – 000		2	SHEET, SLIDE スベリ シート	
19	FF5 – 3996 – 000		1	PLATE, MOVABLE カドウ バン	
20	FF5 – 2246 – 000		1	SUPPORT, FELT, FRONT タンブ フェルト シバン (マエ)	
20A	FB2 – 0368 – 000		1	SHEET, FELT フェルト シート	
21	FF5 – 2247 – 000		1	SUPPORT, FELT, REAR タンブ フェルト シバン (ウシロ)	
21A	FB2 – 0368 – 000		1	SHEET, FELT フェルト シート	
22	FS1 – 1213 – 000		1	BUSHING ブッシング	
23	FF5 – 2248 – 030		1	SUPPORT, CUSHION, FRONT タンブ シール シバン (マエ)	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
835 – 23A	FB2 – 0378 – 020		1	CUSHION, FRONT タンブ シール (マエ)	
24	FF5 – 2249 – 030		1	SUPPORT, CUSHION, REAR タンブ シール シバン (ウシロ)	
24A	FB2 – 0378 – 020		1	CUSHION, FRONT タンブ シール (マエ)	
25	FF5 – 2326 – 000		1	COVER, LOWER シタ カバー ケース	
25A	FB2 – 0384 – 000		1	SHEET, INNER ナカ シール	
26	FF5 – 2327 – 000		1	SUPPORT, SHAFT ジク シバン	
26A	FB2 – 0383 – 000		1	SHEET, REAR ハイメン シール	
27	FS1 – 1449 – 000		1	BUSHING ブッシング	
28	FB2 – 6341 – 000		1	ARM, ONE – WAY ワンウェイ アーム	
29	FS5 – 1377 – 000		2	BUSHING ブッシング	
30	FS5 – 2577 – 000		1	SPRING, COMPRESSION アッシュク バネ	
31	FS5 – 2613 – 000		1	SPRING, TENSION ヒッパリ バネ	
32	FB2 – 6342 – 000		1	LOCK, ONE – WAY ワンウェイ ロック	
33	XD9 – 0103 – 000		1	PIN,DOWEL ヘイコウ ピン	
34	FB2 – 6343 – 000		1	SPRING, TORSION ネジリ バネ	
35	FB2 – 6340 – 000		1	CAM カム	
36	FB2 – 0372 – 000		1	PLATE, CONTINUITY ドウツウ バン	
37	FB2 – 8714 – 020		1	PLATE, LEVER, 1 レバー バン (1)	
38	FB2 – 8715 – 000		1	PLATE, LEVER, 2 レバー バン (2)	
39	FS1 – 9010 – 000		1	SCREW,STEPPED,M3X2.2 ダンビス	
40	FB2 – 0385 – 000		1	SHEET, LOWER, REAR シール	
501	XB1 – 2300 – 609		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2301 – 409		1	SCREW,MACH.,TRUSS HEAD,M3X14 バインド ネジ	
503	XB1 – 2301 – 609		1	SCREW,MACH.,TRUSS HEAD,M3X16 バインド ネジ	
504	XB1 – 2400 – 609		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
505	XB6 – 2400 – 809		1	SETSCREW,M4X8 ロッカク アナツキ トメネジ	
506	XB4 – 7300 – 809		AR	SCREW,TAPPING,TRUSS HEAD,M3X8 バインド タッピン ネジ	
507	XB6 – 7300 – 609		6	SCREW,TP,M3X6 TP ネジ	
508	XD1 – 1106 – 223		2	SHIM ヒョウジュン ワッシャ	
509	XD1 – 1106 – 723		AR	SHIM ヒョウジュン ワッシャ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
835 – 510	XD2 – 1100 – 502		3	RING,E E リング	
511	XD2 – 1100 – 642		3	RING,E E リング	
512	XB2 – 8301 – 005		1	SCREW,W/WASHER,M3X10 バネツキ バインド ネジ	

FIGURE 910 MAIN POWER SUPPLY PCB ASSEMBLY
メイン電源回路基板

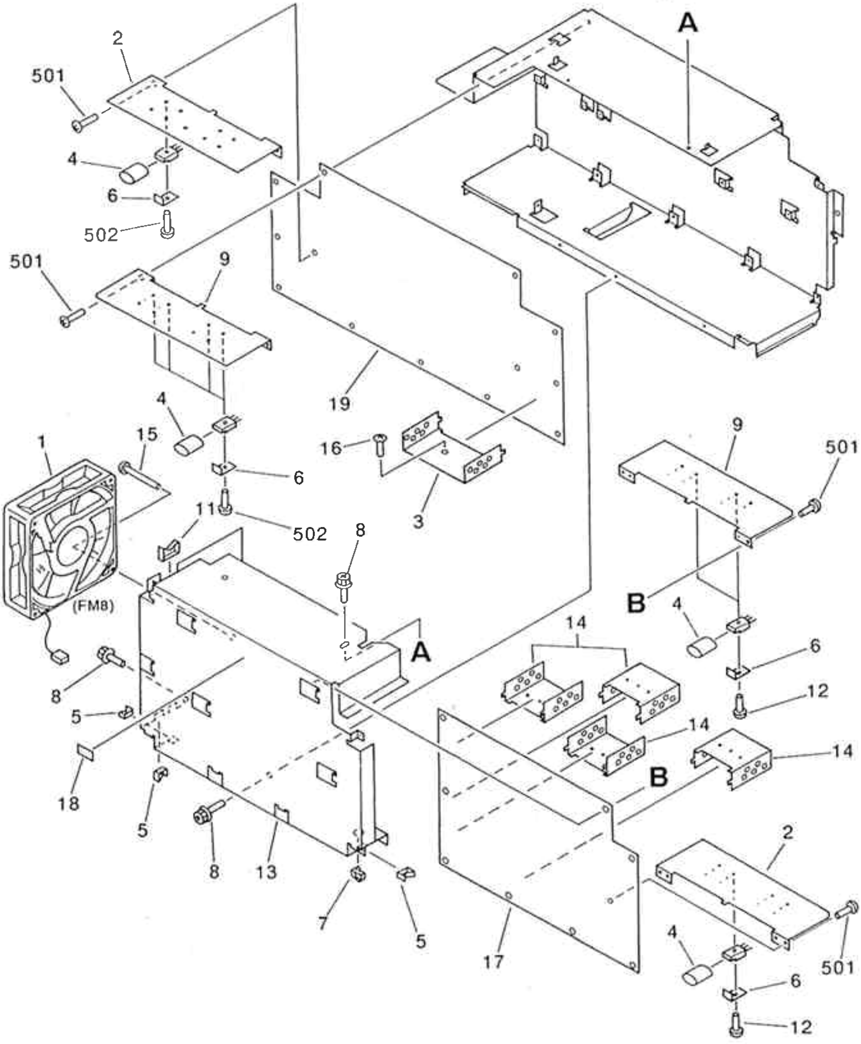

2
501
4
6
502
501
9
A
19
4
15
1
16
6
3
11
502
8
9
501
(FM8)
B
4
6
8
A
14
5
12
18
14
14
B
5
8
13
2
7
5
17
4
501
6
12

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
910 –	FG5 – 2546 – 060		1	MAIN POWER SUPPLY PCB ASSEMBLY メイン デンゲン カイロ キバン	100V
	FG5 – 5367 – 050		1	MAIN POWER SUPPLY PCB ASSEMBLY メイン デンゲン カイロ キバン	115/120V
	FG5 – 3388 – 050		1	MAIN POWER SUPPLY PCB ASSEMBLY メイン デンゲン カイロ キバン	220/240V
1	RH7 – 1104 – 030		1	FAN, MOTOR ファン	FM8
2	FB2 – 1337 – 030		2	HEATSINK, 1 ヒート シンク (1)	
3	FB2 – 1339 – 000		1	HEATSINK, 3 ヒート シンク (3)	
4	RH7 – 8035 – 000		12	SHEET, INSULATION ゼツエン シート	
5	WT2 – 5035 – 000		4	CLIP, CABLE エッジ サドル	
6	FB1 – 5409 – 000		12	PLATE, HOLDER コテイ バン	
7	WT2 – 5212 – 000		3	CLAMP, CABLE, MINI ミニ クランプ	
8	XA9 – 0629 – 000		4	SCREW,RS,M4X8 RS タイト ネジ	
9	FB3 – 2061 – 000		2	HEATSINK ヒートシンク	
10	FB2 – 1335 – 000		1	MOUNT, DCPI, 1 DCPI バン (1)	
11	WT2 – 5165 – 000		1	CLIP, CABLE エッジ サドル	
12	XA9 – 0236 – 000		9	SCREW, WITH WASHER, M3X10 ザガネツキ トメ ネジ	
13	FB2 – 1336 – 000		1	MOUNT, DCPI, 2 DCPI バン (2)	
14	FB2 – 1338 – 000		4	HEATSINK, 2 ヒート シンク (2)	
15	XA9 – 0716 – 000		2	SCREW,RS,M4X33 RS タイト ネジ	
16	XA9 – 0235 – 000		7	SCREW, W/WASHER, M3X8 バネツキ ネジ	
17	NPN		RF	MAIN POWER SUPPLY – A PCB ASS'Y メイン デンゲン－A カイロ キバン	
18	FA9 – 0029 – 000		1	LABEL, "VOLTAGE" デンアツ シュウハスウ ラベル	100V
	FA9 – 0023 – 000		1	LABEL, "VOLTAGE" デンアツ シュウハスウ ラベル	115/120V
	FS8 – 8659 – 000		1	LABEL, "VOLTAGE" デンアツ シュウハスウ ラベル	220/240V
19	NPN		RF	MAIN POWER SUPPLY – B PCB ASS'Y メイン デンゲン－B カイロ キバン	
501	XB2 – 4301 – 007		AR	SCREW,W/WASHER,M3X10 バネツキ ナベ ネジ	
502	XB2 – 4301 – 205		AR	SCREW,W/WASHER,M3X12 バネツキ ナベ ネジ	

FIGURE 920 EDITOR PAD ASSEMBLY
エディタパッド

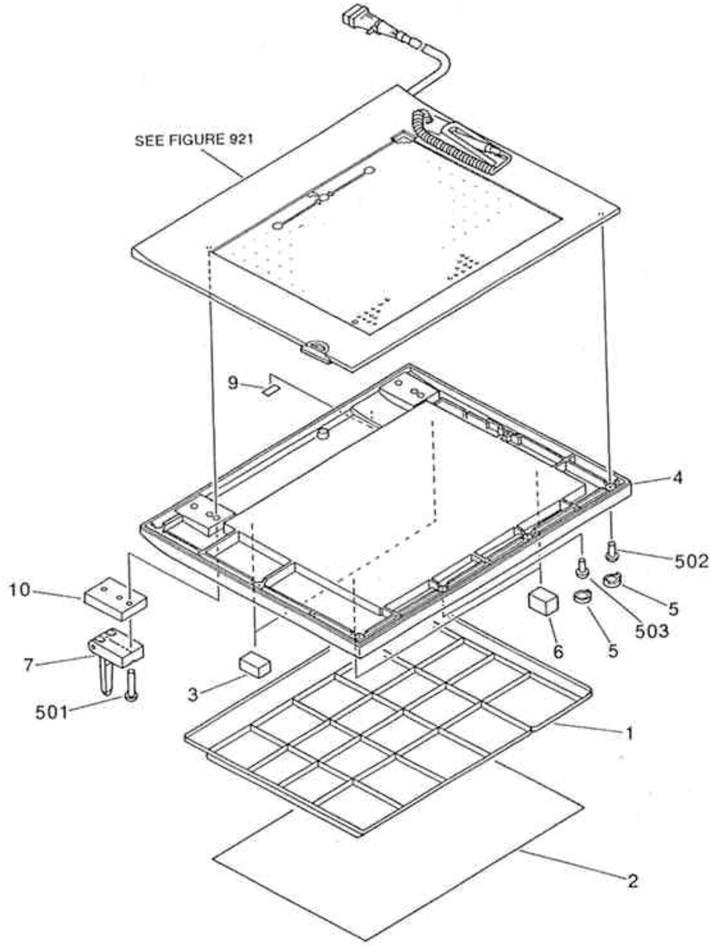
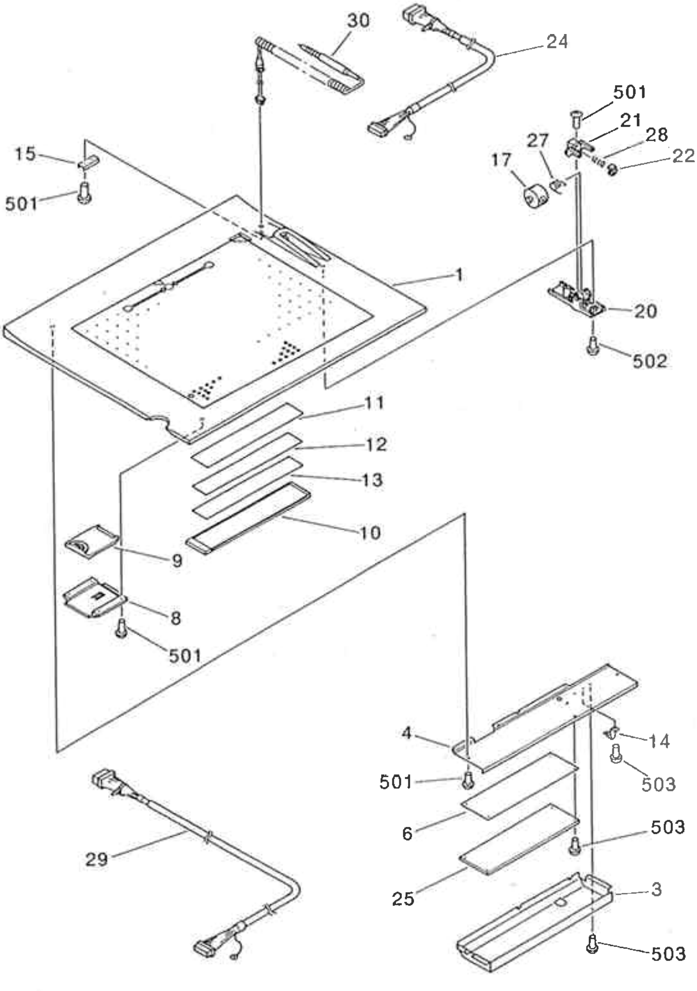

SEE FIGURE 921
9
4
502
10
5
503
6
5
7
3
501
1
2

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
920 –	NPN		RF	EDITOR PAD ASSEMBLY エディタ パッド	OPTION F23 – 9401
1	FA3 – 0134 – 000		1	PLATE, MIRROR ミラー バン	
2	FA3 – 0136 – 050		1	CUSHION, COPYBOARD COVER アッチャク シート	
3	FA6 – 5049 – 000		2	DAMPER, B ダンパ (B)	
4	FB2 – 9187 – 020	N	1	COVER, COPYBOARD, LOWER アッパン (シタ)	
5	FB2 – 2581 – 000		6	RUBBER, COVER カバー ゴム	
6	FC2 – 0630 – 000		2	DAMPER, D ダンパ (D)	
7	FC2 – 0631 – 040		2	HINGE ヒンジ	
9	FS8 – 8997 – 000		1	NAME PLATE メイショウ メイハン	
10	FA6 – 0372 – 000		2	PLATE, HINGE ヒンジ プレート	
501	XB1 – 2402 – 306		6	SCREW,MACH.,TRUSS HEAD,M4X23 バインド ネジ	
502	XB4 – 6401 – 006		8	SCREW,TAPPING,PAN HEAD,M4X10 ナベ タッピン ネジ	
503	XB1 – 2400 – 606		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	

FIGURE 921 EDITOR ASSEMBLY
エディタ本体

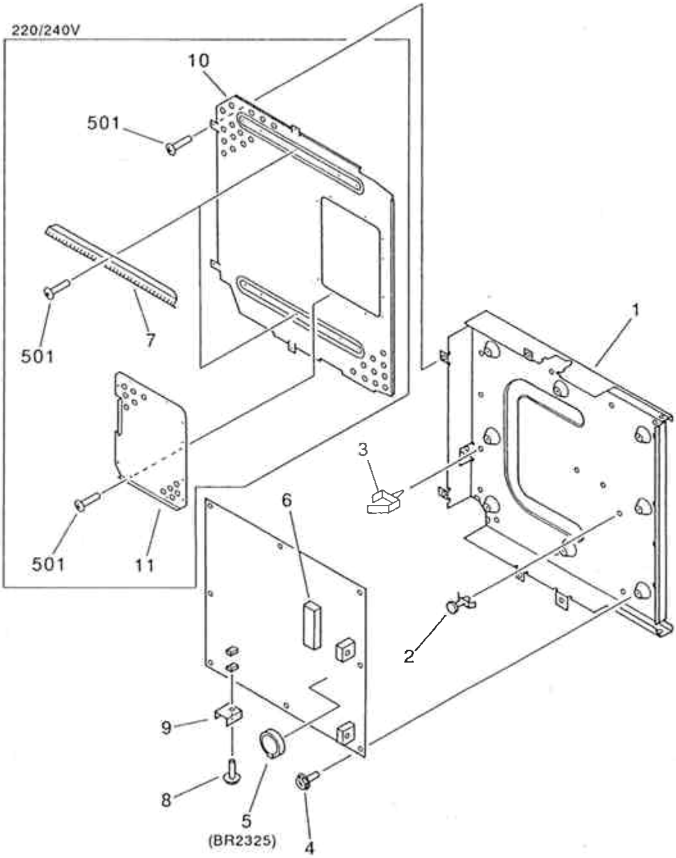

30
24
501
21
28
27
22
17
15
501
1
20
502
11
12
13
10
9
8
501
4
14
503
501
503
6
503
29
25
3
503

NOTE : This assembly does not include the part shown with key No. 29.

注：このユニットに、 Key No. 29の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
921 –	FG2 – 6483 – 000		1	EDITOR ASSEMBLY エディタ ホンタイ	
1	FF3 – 0252 – 000		1	UPPER COVER UNIT ウエ カバー ユニット	
3	FC2 – 0604 – 000		1	COVER, PCB キバン カバー	
4	FC2 – 0605 – 000		1	MOUNT, PCB キバン トリツケ ダイ	
6	FC2 – 0607 – 000		1	SHEET, INSULATING ゼツエン シート	
8	FC2 – 0609 – 000		1	COVER, CARD カード カバー	
9	FC2 – 0610 – 000		1	BASE, CARD カード ベース	
10	FC2 – 0611 – 000		1	CASE, SHEET シート ケース	
11	FC2 – 0612 – 000		1	SHEET, COLLAR, A カラー パレット (A)	
12	FC2 – 0613 – 000		1	SHEET, COLLAR, B カラー パレット (B)	
13	FC2 – 0614 – 000		1	SHEET, COLLAR, C カラー パレット (C)	
14	FC2 – 0615 – 000		1	CLAMP, CABLE ケーブル クランプ	
15	FC2 – 0616 – 000		1	RETAINER, CABLE ケーブル オサエ	
17	FF5 – 4926 – 000		1	HOLDER, PEN ペンタテ ドラム	
20	FC2 – 0623 – 000		1	COVER, PEN HOLDER ペンタテ カバー	
21	FC2 – 0624 – 000		1	HOLDER, DRUM ドラム ホルダ	
22	FC2 – 0625 – 000		1	HOLDER, SUPPORT ホルダ サポート	
24	FH2 – 6022 – 000		1	CABLE, DIGITIZER I/F デジタイザ I/F ケーブル	
25	FH6 – 3412 – 000		1	EDITOR CONTROLLER PCB UNIT エディタ セイギョ カイロ キバン	
27	FS4 – 2355 – 000		1	SPRING, TORSION ネジリ バネ	
28	FS4 – 2356 – 000		1	SPRING, COMPRESSION アッシュク バネ	
29	NPN		1	CABLE, EDITOR エディタ エンチョウ ケーブル	F24 – 9410 SEE NOTE
30	FF2 – 9912 – 000		1	PEN, DIGITIZER デジタイザ ニュウリョク ペン	
501	XB4 – 6300 – 809		AR	SCREW,TAPPING,PAN HEAD,M3X8 ナベ タッピン ネジ	
502	XB4 – 6401 – 006		2	SCREW,TAPPING,PAN HEAD,M4X10 ナベ タッピン ネジ	
503	XB2 – 4300 – 809		AR	SCREW,W/WASHER,M3X8 バネツキ ナベ ネジ	

FIGURE 930 DC CONTROLLER PCB ASSEMBLY
DCコントローラ回路基板



220/240V
10
501
501
7
501
11
501
1
3
6
2
9
8
5
(BR2325)
4

NOTE : This assembly does not include the parts shown with key No. 1, 2, 3, 4, 7, 10, 11 and 501.

注 ： このユニットに、 Key No. 1, 2, 3, 4, 7, 10, 11, 501の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
930 –	FG5 – 6536 – 120		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	JAPANESE LJL
	FG5 – 6537 – 120		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	ENGLISH NJB,NJC ITALIAN PFW ILLUSTRATION UDK
	FG5 – 6538 – 120		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	ENGLISH QBX,RCB GERMAN TBC
	FG5 – 7894 – 050		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	FRENCH SBB
	FG5 – 6539 – 120		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	ENGLISH PFG/KOREAN
	FG5 – 7420 – 000		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	JAPANESE LJN
	FG5 – 9383 – 000		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	ENGLISH QBY,RCC GERMAN TBD
	FG5 – 9384 – 000		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	FRENCH SBC
	FG5 – 9382 – 000		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	ITALIAN PFX ILLUSTLATION UDL
	FG5 – 6548 – 120		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	JAPANESE LJP
	FG5 – 6549 – 120		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	ENGLISH NJD ITALIAN PFZ ILLUSTRATION UDM
	FG5 – 6551 – 120		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	ENGLISH PFT
	FG5 – 6550 – 120		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	ENGLISH QBZ,RCD GERMAN TBE
	FG5 – 7897 – 050		1	DC CONTROLLER PCB ASSEMBLY DC コントローラ カイロ キバン	FRENCH SBD
1	FB2 – 0128 – 000	N	1	MOUNT, PCB キバン ダイ	SEE NOTE
2	VT2 – 0002 – 004		3	SPACER, SUPPORT サポート スペーサ	SEE NOTE
3	WT2 – 0499 – 000		9	CLIP, CABLE ロッキング ワイヤ サドル	SEE NOTE
4	XA9 – 0642 – 000		8	SCREW,RS,M3X6 RS タイト ネジ	SEE NOTE
5	WK1 – 5007 – 000		1	BATTERY, LITHIUM, CR2354 – 1GU4 リチウム デンチ	BR2325
6	FF2 – 9078 – 160		1	IC, HN27C4096HG85, EP – ROM 1 EP – ROM (1)	
7	FB3 – 1134 – 000		2	PLATE, GROUNDING アース バン	115/220/240V SEE NOTE
8	XA9 – 0235 – 000		2	SCREW, W/WASHER, M3X8 バネツキ ネジ	
9	FB2 – 1410 – 000		2	HEATSINK ホウネツ バン	
10	FB3 – 0897 – 000		1	COVER, DC, 1 DC コントローラ カバー (1)	115/220/240V SEE NOTE
11	FB3 – 0898 – 000		1	COVER, DC, 2 DC コントローラ カバー (2)	115/220/240V SEE NOTE
501	XB1 – 2300 – 606		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	115/220/240V SEE NOTE

FIGURE 932 READER CONTROLLER ASSEMBLY
リーダコントローラ部

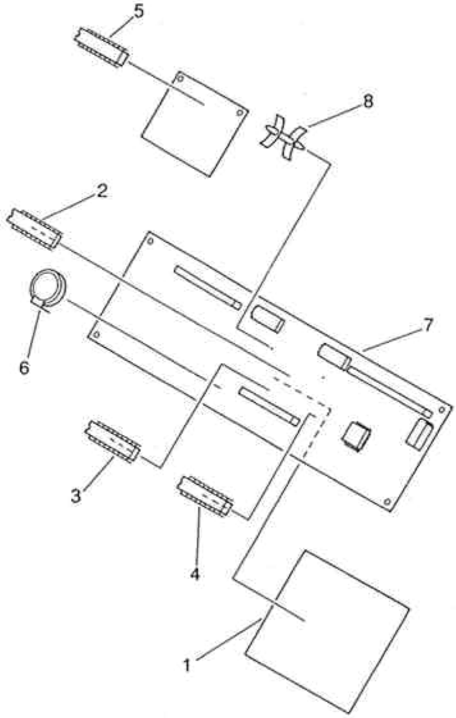


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
932 −	FG5 − 5882 − 090		1	READER CONTROLLER ASSEMBLY リーダ コントローラ ブ	**JAPANESE**
	FG5 − 5883 − 080		1	READER CONTROLLER ASSEMBLY リーダ コントローラ ブ	**ENGLISH NJC,NJD**
	FG5 − 5887 − 080		1	READER CONTROLLER ASSEMBLY リーダ コントローラ ブ	**ENGLISH NJB,PFG,PFT RCB,RCC,RCD/KOREAN**
	FG5 − 5884 − 080		1	READER CONTROLLER ASSEMBLY リーダ コントローラ ブ	**ENGLISH QBX,QBY,QBZ ILLUSTRATION**
	FG5 − 5885 − 080		1	READER CONTROLLER ASSEMBLY リーダ コントローラ ブ	**FRENCH**
	FG5 − 5886 − 080		1	READER CONTROLLER ASSEMBLY リーダ コントローラ ブ	**GERMAN**
	FG6 − 0675 − 000		1	READER CONTROLLER ASSEMBLY リーダ コントローラ ブ	ITALIAN
1	FB3 − 1781 − 000		1	SHEET, INSULATING ゼツエン シート	
2	FF2 − 9080 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	JAPANESE
	FF2 − 9093 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH NJC,NJD
	FF2 − 9125 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH NJB,PFG,PFT RCB,RCC,RCD/KOREAN
	FF2 − 9101 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH QBX,QBY,QBZ ILLUSTRATION
	FF2 − 9109 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	FRENCH
	FF2 − 9117 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	GERMAN
	FF3 − 0846 − 000		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ITALIAN
3	FF2 − 9081 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	JAPANESE
	FF2 − 9094 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH NJC,NJD
	FF2 − 9126 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH NJB,PFG,PFT RCB,RCC,RCD/KOREAN
	FF2 − 9102 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH QBX,QBY,QBZ ILLUSTRATION
	FF2 − 9110 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	FRENCH
	FF2 − 9118 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	GERMAN
	FF3 − 0847 − 000		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ITALIAN
4	FF2 − 9082 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	JAPANESE
	FF2 − 9095 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH NJC,NJD
	FF2 − 9127 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH NJB,PFG,PFT RCB,RCC,RCD/KOREAN
	FF2 − 9103 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	ENGLISH QBX,QBY,QBZ ILLUSTRATION
	FF2 − 9111 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	FRENCH
	FF2 − 9119 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	GERMAN
	FF3 − 0848 − 000		1	IC, HN27C4096G − 10, EP − ROM P − ROM	ITALIAN
5	FF2 − 9083 − 170		1	IC, HN27C4096G − 10, EP − ROM EP − ROM	JAPANESE

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
932 – 5	FF2 – 9096 – 170		1	IC, HN27C4096G – 10, EP – ROM EP – ROM	ENGLISH NJC,NJD
	FF2 – 9128 – 170		1	IC, HN27C4096G – 10, EP – ROM EP – ROM	ENGLISH NJB,PFG,PFT RCB,RCC,RCD/KOREAN
	FF2 – 9104 – 170		1	IC, HN27C4096G – 10, EP – ROM EP – ROM	ENGLISH QBX,QBY,QBZ ILLUSTRATION
	FF2 – 9112 – 170		1	IC, HN27C4096G – 10, EP – ROM EP – ROM	FRENCH
	FF2 – 9120 – 170		1	IC, HN27C4096G – 10, EP – ROM EP – ROM	GERMAN
	FF3 – 0849 – 000		1	IC, HN27C4096G – 10, EP – ROM EP – ROM	ITALIAN
6	WK1 – 5007 – 000		1	BATTERY, LITHIUM, CR2354 – 1GU4 リチウム デンチ	
7	NPN		RF	READER CONTROLLER PCB ASSEMBLY リーダ コントローラ カイロ キバン	
8	VT2 – 0013 – 140		2	SUPPORT, PCB ロッキング サポート	

FIGURE 935 IMAGE PROCESSOR PCB CASE
イメージプロセッサケース

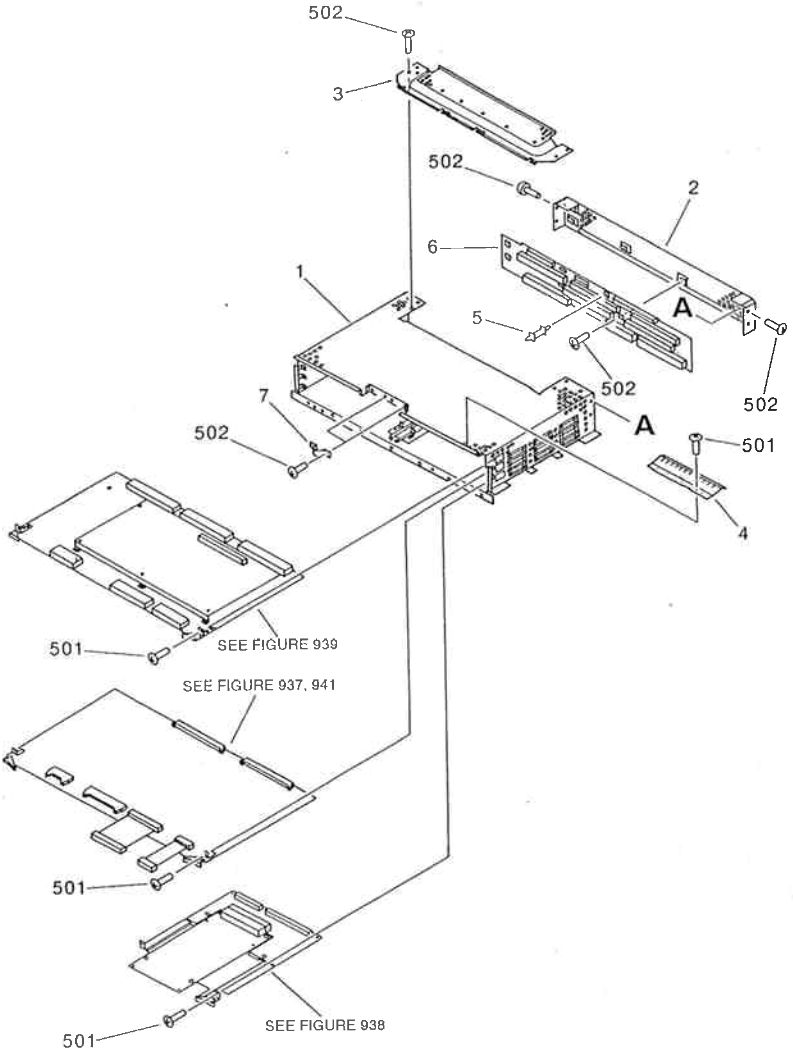

502
3
502
2
6
1
5
A
502
502
7
502
A
501
4
SEE FIGURE 939
501
SEE FIGURE 937, 941
501
SEE FIGURE 938
501

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
935 –	NPN		RF	IMAGE PROCESSOR PCB CASE イメージ プロセッサ ケース	
1	FF5 – 4059 – 000		1	CASE, I/P I/P ケース	
2	FB3 – 1443 – 000		1	PLATE, I/P I/P バン	
3	FB2 – 0115 – 020		1	COVER, I/P, UPPER I/P カバー (ウエ)	
4	FB2 – 9905 – 000		2	PLATE, GROUNDING アース バン	
5	VT2 – 0001 – 003		1	SUPPORT, PCB ロッキング サポート	
6	FG5 – 3073 – 000		1	IMAGE PROCESSER MOTHER PCB イメージ プロセッサ マザー カイロ キバン	
7	FB2 – 4386 – 000		2	GROMMET, IP IP ケーブル クランプ	
501	XB1 – 2300 – 606		13	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 – 2400 – 606		12	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	

FIGURE 937 IMAGE PROCESSOR ED PCB ASSEMBLY
イメージプロセッサED回路基板

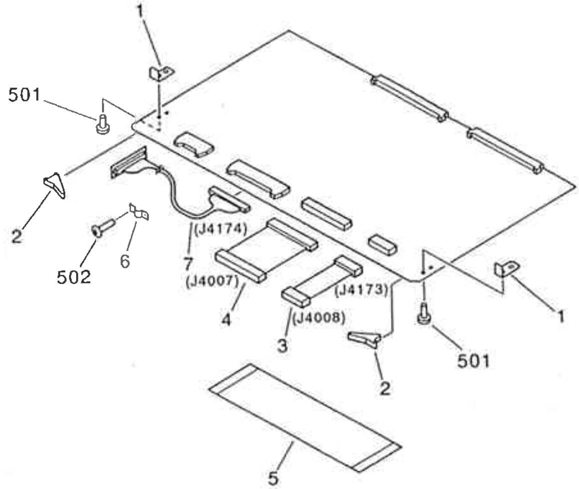


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
937 –	FG5 – 3075 – 100		1	IMAGE PROCESSER ED PCB ASS'Y イメージ プロセッサ ED カイロ キバン	CLC950 100V
1	FB2 – 1334 – 000		2	PLATE, PCB STOP, 1 キバン コテイ バン (1)	
2	WS9 – 0090 – 000		2	ARM アーム	
3	FF2 – 9054 – 000		1	CABLE, IP – ED IP – ED ケーブル	J4008,4173
4	FF2 – 9055 – 000		1	CABLE, IP – ED IP – ED ケーブル	J4007,4174
5	FB2 – 6287 – 000		1	SHEET ホゴ シート	
6	FB2 – 4386 – 000		2	GROMMET, IP IP ケーブル クランプ	
7	FH2 – 6031 – 000		1	CABLE, IP/IF IP/IF ケーブル	
501	XB1 – 2300 – 406		2	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	

FIGURE 938 IMAGE PROCESSOR ECO PCB ASSEMBLY
イメージプロセッサECO回路基板

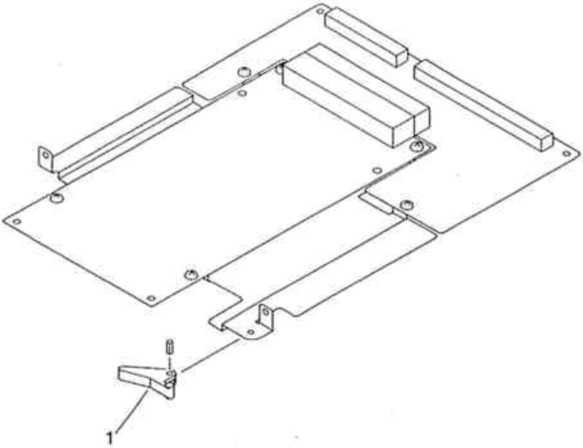


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
938 –	FG5 – 9723 – 000		1	IMAGE PROCESSOR ECO PCB ASS'Y イメージ プロセッサ ECO カイロ キバン	
1	WS9 – 0090 – 000		1	ARM アーム	

FIGURE 939 IMAGE PROCESSOR MAIN PCB ASSEMBLY
イメージプロセッサメイン回路基板

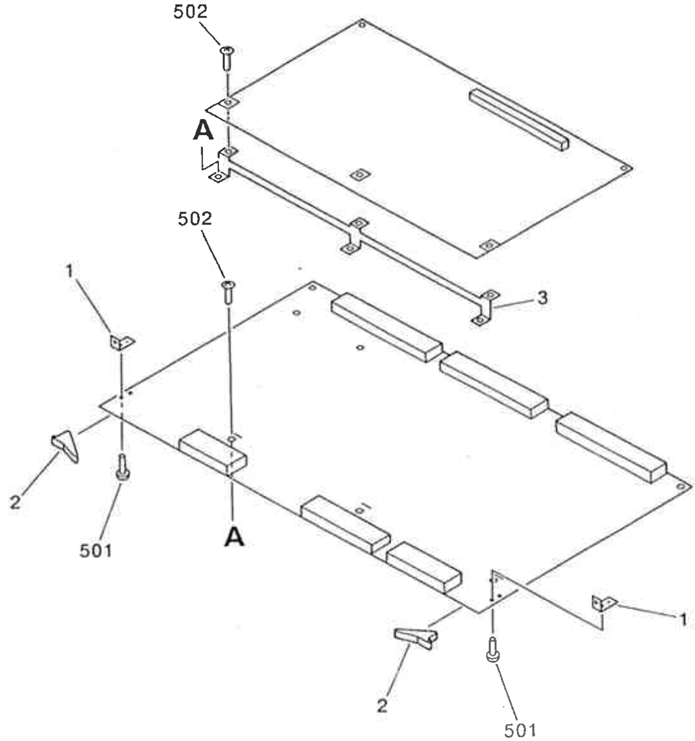

502
A
502
3
1
2
501
A
1
2
501

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
939 –	FG5 – 3253 – 000		1	IMAGE PROCESSOR MAIN PCB ASS'Y イメージ プロセッサ メイン カイロ キバン	
1	FB2 – 1334 – 000		2	PLATE, PCB STOP, 1 キバン コテイ バン (1)	
2	WS9 – 0090 – 000		2	ARM アーム	
3	FB2 – 4380 – 000		1	MOUNT, PCB キバン ダイ	
501	XB1 – 2300 – 406		2	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
502	XB1 – 2300 – 607		6	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	

FIGURE 941

IMAGE PROCESSOR IF PCB ASSEMBLY
イメージプロセッサ IF 回路基板

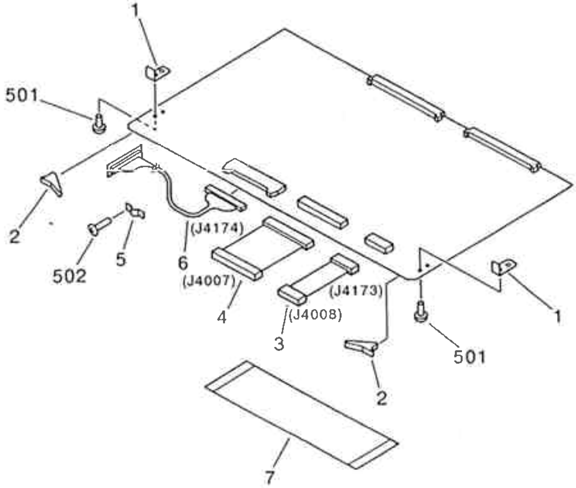


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
941 –	FG5 – 3077 – 000		1	IMAGE PROCESSOR IF PCB ASS'Y イメージ プロセッサ IF カイロ キバン	OPTION F23 – 9412
1	FB2 – 1334 – 000		2	PLATE, PCB STOP, 1 キバン コテイ バン (1)	
2	WS9 – 0090 – 000		2	ARM アーム	
3	FF2 – 9054 – 000		1	CABLE, IP – ED IP – ED ケーブル	J4008,4173
4	FF2 – 9055 – 000		1	CABLE, IP – ED IP – ED ケーブル	J4007,4174
5	FB2 – 4386 – 000		2	GROMMET, IP IP ケーブル クランプ	
6	FH2 – 6031 – 000		1	CABLE, IP/IF IP/IF ケーブル	
7	FB2 – 6287 – 000		1	SHEET ホゴ シート	
501	XB1 – 2300 – 406		2	SCREW,MACH.,TRUSS HEAD,M3X4 バインド ネジ	
502	XB1 – 2400 – 606		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	

FIGURE 947 POTENTIAL MEASURING PCB ASSEMBLY 電位測定回路基板

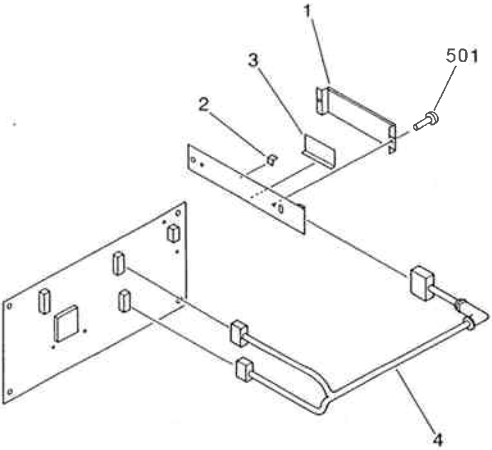


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
947 –	FG5 – 2545 – 000		1	POTENTIAL MEASURING PCB ASS'Y デンイ ソクテイ カイロ キバン	
1	FA4 – 0892 – 000		1	COVER, SENSOR センサ カバー	
2	FA4 – 0891 – 000		1	TERMINAL ソクテイ デンキョク	
3	FA4 – 0893 – 000		1	COVER, SHIELD シールド ケース	
4	FG5 – 3115 – 000		1	CABLE ケーブル	
501	XA1 – 6200 – 306		2	SCREW,MACH.,PAN HEAD,M2X3 ナベ ネジ	

FIGURE 950 ANALOG PROCESSOR ASSEMBLY
アナログプロセッサ部

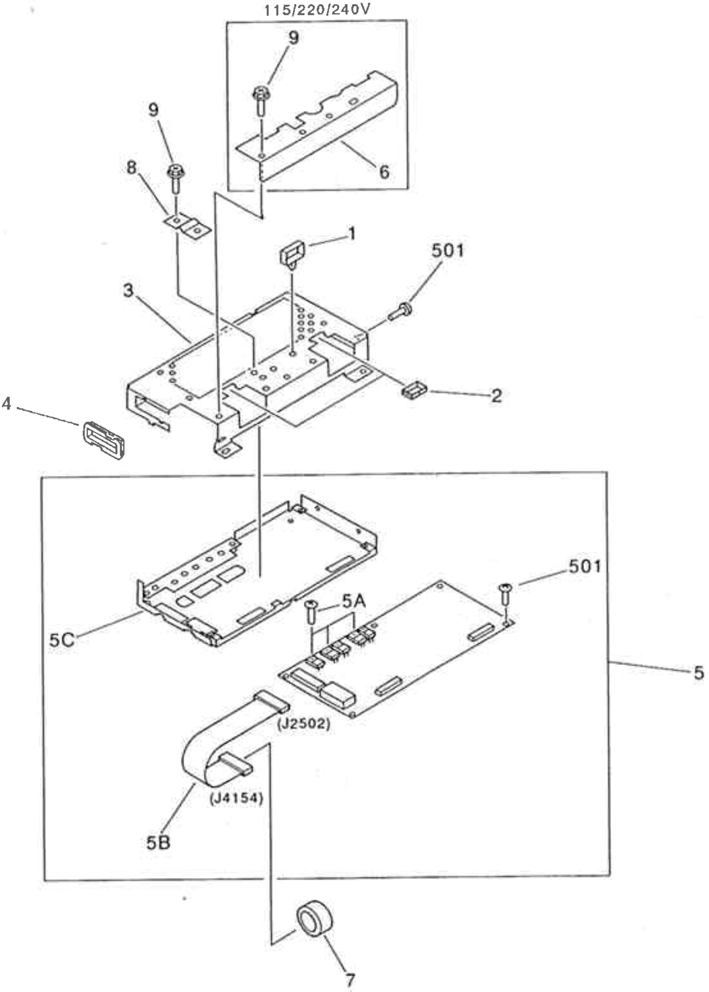

115/220/240V
9
9
8
6
1
501
3
2
4
501
5A
5C
5
(J2502)
(J4154)
5B
7

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
950 –	NPN		RF	ANALOG PROCESSOR ASSEMBLY アナログ プロセッサ ブ	
1	WT2 – 5018 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	
2	WT2 – 5011 – 000		2	CLIP, CABLE エッジ サドル	
3	FB2 – 1394 – 020		1	SHIELD, ANALOG PROCESSOR アナログ プロセッサ シールド バン	
4	FB2 – 1399 – 000		1	BUSHING ブッシング	
5	FG5 – 9441 – 000		1	ANALOG PROCESSOR PCB ASSEMBLY アナログ プロセッサ カイロ キバン	
5A	XA9 – 0235 – 000		3	SCREW, W/WASHER, M3X8 バネツキ ネジ	
5B	FF2 – 9067 – 000		1	CABLE, ANALOG PROCESSOR アナログ プロセッサ ケーブル	
5C	FB2 – 1392 – 000		1	HEATSINK 4 ヒートシンク	
6	FB3 – 1145 – 000		1	COVER, SHIELD シールド バン カバー	115/220/240V
7	WE8 – 5101 – 000		1	CORE, FERRITE フェライト コア	
8	FA4 – 9697 – 000		2	HOLDER, SHIELD シールド オサエ	
9	XA9 – 0629 – 000		AR	SCREW,RS,M4X8 RS タイト ネジ	
501	XB1 – 2300 – 607		AR	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	

FIGURE 960 TRANSFER DRIVER PCB ASSEMBLY
転写ドライバ回路基板

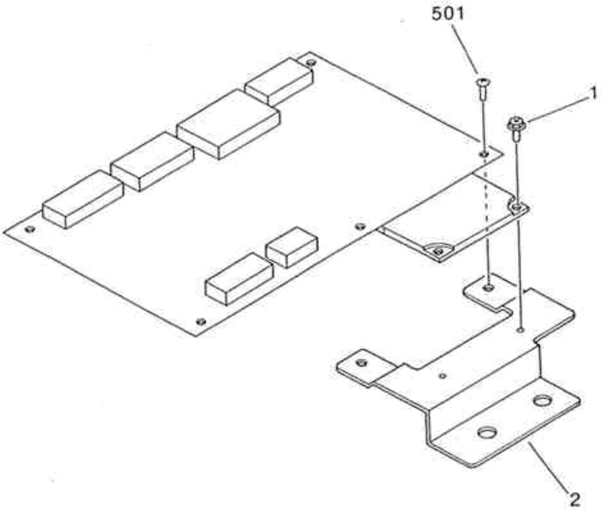
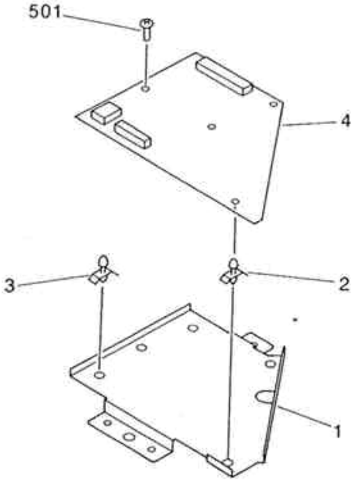


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
960 –	FG5 – 3057 – 000		1	TRANSFER DRIVER PCB ASSEMBLY テンシャ ドライバ カイロ キバン	
1	FA9 – 2932 – 000		2	SCREW, W/WASHER, M3X6 ザガネツキ ネジ	
2	FB2 – 0568 – 000		1	HEATSINK ホウネツ バン	
501	XB1 – 2400 – 607		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	

FIGURE 965 SCANNER DRIVER ASSEMBLY
スキャナドライバ部



NOTE : The part with key No. 4 is included in the assembly shown in Figs.103-34B and 34.

注 ： Key No. 4の部番は、Fig 103-34Bおよび34に記載の部番に含まれます。

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
965 –	NPN		RF	SCANNER DRIVER ASSEMBLY スキャナ ドライバ ブ	
1	FB2 – 1397 – 000		1	CROSSMEMBER, DRIVE ドライバ ステイ	
2	VT2 – 0001 – 003		3	SUPPORT, PCB ロッキング サポート	
3	VT2 – 0002 – 003		2	SPACER, SUPPORT サポート スペーサ	
4	NPN		RF	SCANNER MOTOR ASSEMBLY スキャナ モータ ブ	SEE NOTE
501	XB1 – 2400 – 607		1	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	

FIGURE 967 SCANNER MOTOR DRIVER ASSEMBLY
スキャナモータドライバ回路基板

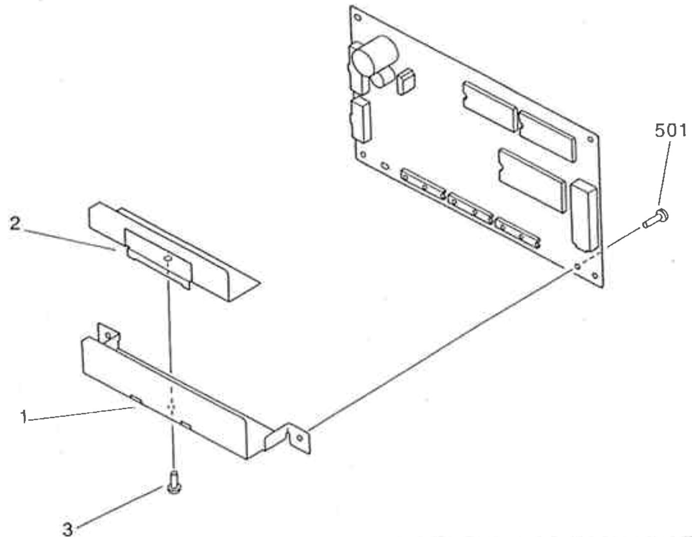


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
967 –	FG5 – 3072 – 020		1	SCANNER MOTOR DRIVER ASSEMBLY スキャナ モータ ドライバカイロ キバン	
1	FB2 – 0232 – 000		1	HEATSINK, 1 ホウネツ バン (1)	
2	FB2 – 0236 – 000		1	HEATSINK, 2 ホウネツ バン (2)	
3	XA9 – 0207 – 000		1	SCREW セムス ネジ	
501	XB1 – 2400 – 607		2	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	

FIGURE 971 BLACK TONER SENSOR ASSEMBLY
黒トナー濃度検知部

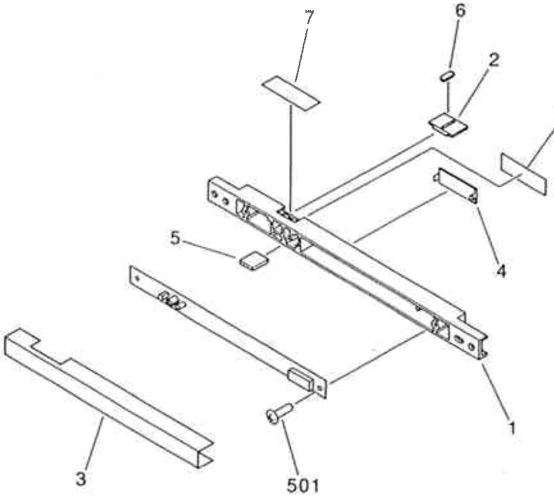


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
971 –	FG5 – 2610 – 000		1	BLACK TONER SENSOR ASSEMBLY クロ トナー ノウド ケンチ ブ	
1	FB2 – 0451 – 000		1	CASE, BK TONER SENSOR クロトナー ノウドセンサ ケース	
2	FB2 – 0452 – 020		1	WINDOW マド	
3	FB2 – 0453 – 000		1	PLATE, LIGHT – BLOCKING シャコウ バン	
4	FB2 – 0490 – 000		1	COVER, BLACK TONER SENSOR センサ カバー	
5	FN5 – 4004 – 000		1	MIRROR, ATR ATR ハンシャ ミラー	
6	FC1 – 1195 – 000		1	PLATE, SENSOR センサ バン	
7	FB3 – 1636 – 000		1	SEAL, SENSOR センサ マド シール	
8	FB3 – 2050 – 000		1	RETAINER, SHIELD シールド オサエ	
501	XB4 – 7300 – 609		2	SCREW,TAPPING,TRUSS HEAD,M3X6 バインド タッピン ネジ	

FIGURE 980 H. V. TRANSFORMER PCB ASSEMBLY
HVT 回路基板

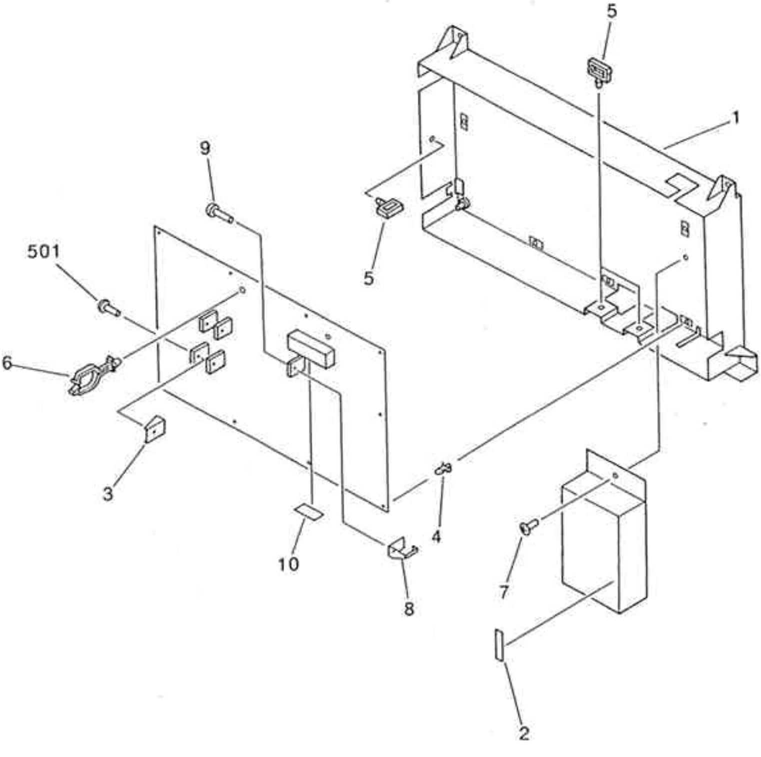

5
1
9
501
5
6
3
4
10
8
7
2

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
980 –	FG5 – 3063 – 000		1	H.V.TRANSFORMER PCB ASSEMBLY HVT カイロ キバン	EXCEPT CLC900 PFE
	FG5 – 7127 – 000		1	H.V.TRANSFORMER PCB ASSEMBLY H.V.T. カイロ キバン	CLC900 PFE
1	FB2 – 0130 – 000		1	CASE, H.V.T. PCB HVT ケース	
2	FC2 – 3083 – 000		8	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	KOREAN
	ME1 – 0038 – 000		8	LABEL, "WARNING, HIGH VOLTAGE" コウアツ チュウイ ラベル	EXCEPT KOREAN
3	RB1 – 3158 – 000		6	PLATE, HEATSINK ホウネツ バン	
4	VT2 – 0006 – 003		10	SUPPORT, PCB ロッキング サポート	
5	WT2 – 0317 – 000		3	CLIP, CABLE ロッキング ワイヤ サドル	
6	WT2 – 0369 – 000		3	CLIP, CABLE クリップ	
7	FA9 – 2753 – 000		1	SCREW,M4X10 P タイト ネジ	
8	FB2 – 9933 – 000		1	HEATSINK, 2 ヒートシンク (2)	
9	FA9 – 1613 – 000		1	SCREW, WASHER PLAIN, M3X6 セムス ビス	
10	FA9 – 2737 – 000		1	SHEET シート	
501	XB2 – 8300 – 805		6	SCREW,W/WASHER,M3X8 バネツキ バインド ネジ	

FIGURE 981 DEVELOPING BIAS PCB ASSEMBLY 現像バイアス回路基板

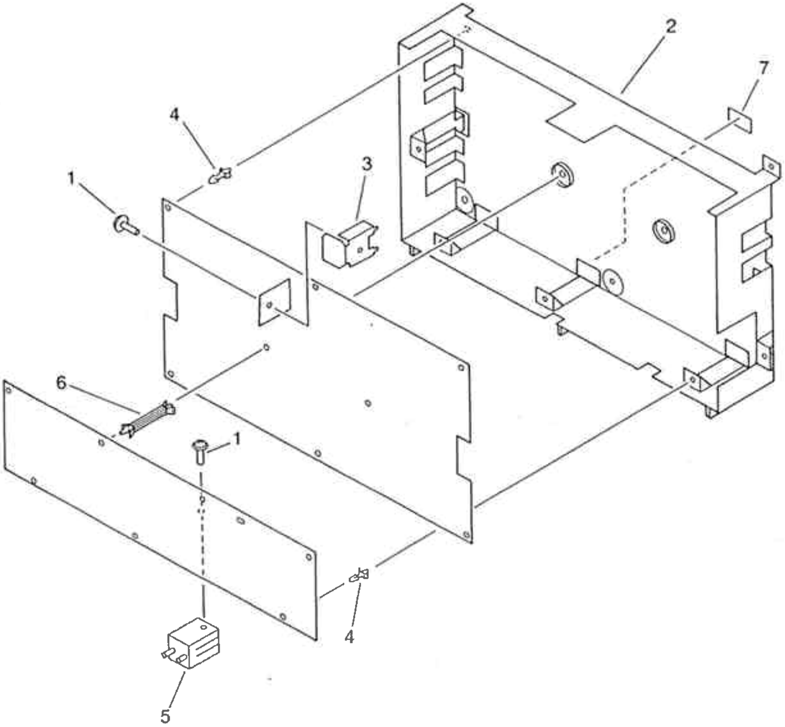
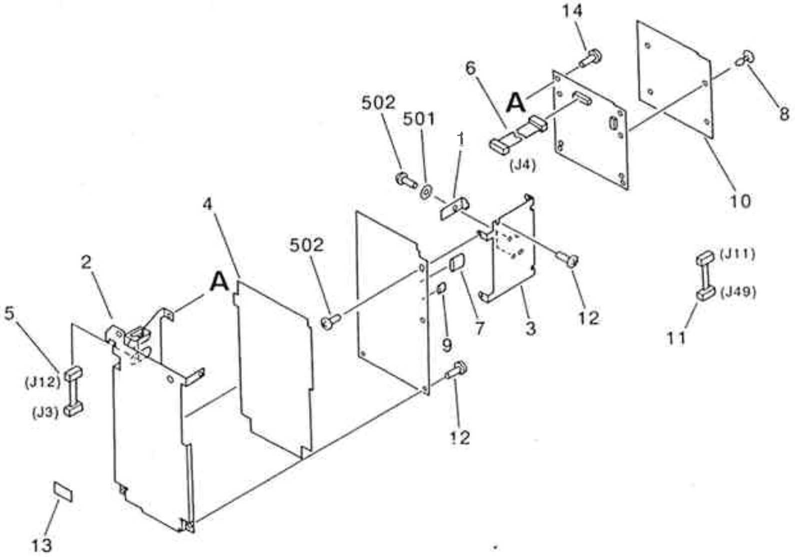


FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
981 –	FG5 – 3068 – 060		1	DEVELOPING BIAS PCB ASSEMBLY ゲンゾウ バイアス カイロ キバン	EXCEPT CLC900 KOREAN
	FG5 – 7418 – 050		1	DEVELOPING BIAS PCB ASSEMBLY ゲンゾウ バイアス カイロ キバン	CLC900 KOREAN
1	FA9 – 2932 – 000		6	SCREW, W/WASHER, M3X6 ザガネツキ ネジ	
2	FB2 – 0129 – 000		1	CASE, DEVELOPING PCB ゲンゾウ バイアス ケース	
3	FB2 – 4388 – 000		4	HEATSINK ホウネツ バン	
4	VT2 – 0006 – 003		11	SUPPORT, PCB ロッキング サポート	
5	WA9 – 5228 – 000		2	HEATSINK ホウネツ バン	
6	WT2 – 9002 – 000		2	SUPPORT, PCB ロッキング サポート	
7	FB3 – 0885 – 000		1	SHEET, HVT HVT シート	
J1	FF2 – 9682 – 000		1	CABLE, 1 ケーブル (1)	
J2	FF2 – 9683 – 000		1	CABLE, 2 ケーブル (2)	
J3	FF3 – 0001 – 000		1	CABLE, POWER デンゲン ケーブル	
J4	FF2 – 9071 – 000		1	CABLE, FAN コウアツ ファン ケーブル	
W1	FF2 – 9684 – 000		1	CABLE, HIGH – VOLTAGE コウアツ ケーブル (1)	

FIGURE 990 LAMP REGULATOR PCB ASSEMBLY
ランプレギュレータ回路基板

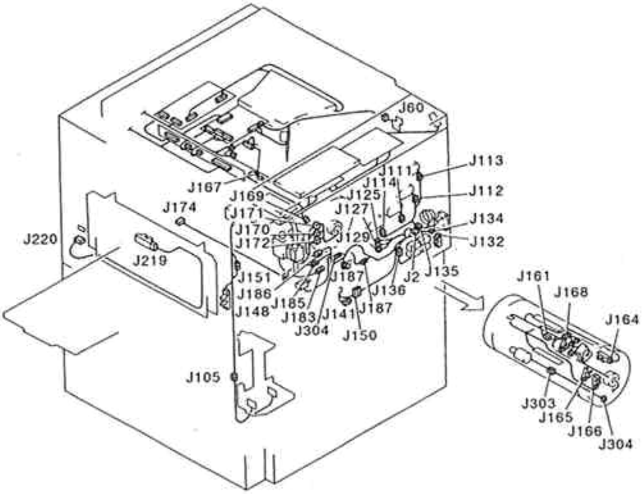

14
6
A
502
501
1
(J4)
8
10
4
502
2
A
5
(J12)
(J3)
(J11)
(J49)
9
7
3
12
11
12
13

NOTE : This assembly does not include the part shown with key No. 11.

注 ： このユニットに、 Key No. 11の部品は含まれません。

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
990 –	FG5 – 3246 – 000		1	LAMP REGULATOR PCB ASSEMBLY ランプ レギュレータ カイロ キバン	100/115/120V
	FG5 – 3247 – 000		1	LAMP REGULATOR PCB ASSEMBLY ランプ レギュレータ カイロ キバン	220/240V
1	FB1 – 5409 – 000		2	PLATE, HOLDER コテイ バン	
2	FB2 – 1344 – 000		1	MOUNT, CVR CVR ダイ	
3	FB2 – 1345 – 000		1	HEATSINK ホウネツ バン	
4	FB2 – 1411 – 000		1	SHEET, INSULATION ゼツエン シート	
5	FF2 – 9564 – 000		1	CABLE, LAMP CONTROL ランプ セイギョ ソクセン	J3,12
6	FF2 – 9565 – 000		1	CABLE, SNAP TIGHT チュウケイ ソクセン	J4
7	FH6 – 8628 – 000		1	HEATSINK ホウネツ シート	100/115/120V
8	VT2 – 0012 – 005		4	SUPPORT, PCB ロッキング サポート	
9	RH7 – 8035 – 000		1	SHEET, INSULATION ゼツエン シート	
10	FB2 – 6304 – 000		1	SHEET, "INSULATING" ゼツエン シート	
11	FG5 – 3155 – 000		1	CABLE, LAMP REGULATOR ランプ レギュレータ ソクセン	100/120V J11,49 SEE NOTE
	FG5 – 3251 – 000		1	CABLE, LAMP REGULATOR ランプ レギュレータ ソクセン	115/220/240V J11,49 SEE NOTE
12	FA9 – 1613 – 000		7	SCREW, WASHER PLAIN, M3X6 セムス ビス	
13	FA9 – 0032 – 000		1	LABEL, "VOLTAGE" デンアツ シュウハスウ ラベル	100/115/120V
	FS8 – 8659 – 000		1	LABEL, "VOLTAGE" デンアツ シュウハスウ ラベル	220/240V
14	FA6 – 6457 – 000		2	SCREW, M3X5 ネジ	
501	XD1 – 2100 – 305		2	WASHER,PLAIN ヒラ ザガネ	
502	XB2 – 4301 – 205		AR	SCREW,W/WASHER,M3X12 バネツキ ナベ ネジ	

FIGURE B LIST OF CONNECTORS (1/5)
コネクター覧 (1/5)


J60
J113
J111
J114
J112
J125
J167
J169
J127
J134
J174
J171
J170
J132
J220
J172
J129
J219
J135
J161
J151
J187
J2
J168
J186
J136
J185
J187
J164
J148
J183
J141
J304
J150
J105
J303
J165
J166
J304

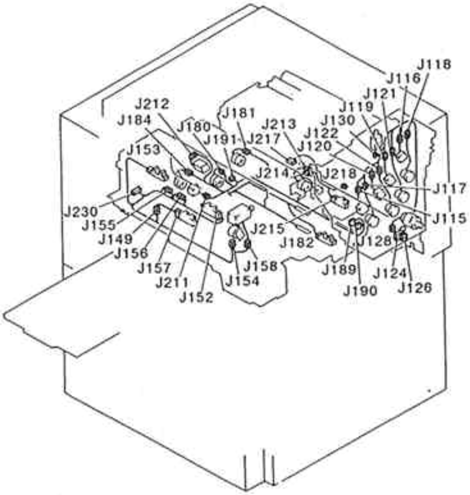
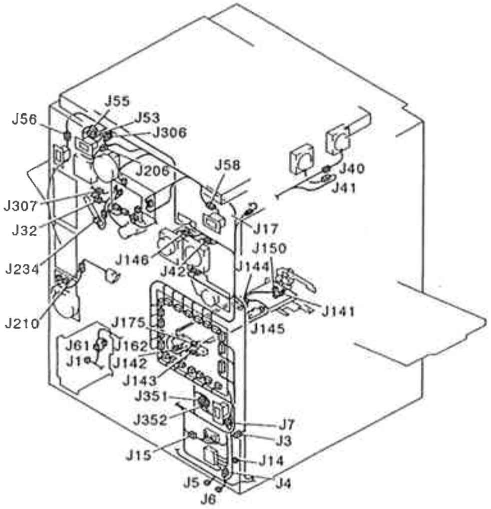

J118
J116
J121
J212
J181
J119
J184
J180
J213
J130
J191
J217
J122
J153
J120
J214
J218
J117
J230
J115
J155
J215
J149
J182
J128
J156
J158
J189
J124
J157
J211
J154
J190
J126
J152

FIGURE B LIST OF CONNECTORS ($^{2}/_{5}$)
コネクター一覧 ($^{2}/_{5}$)


J55
J56
J53
J306
J206
J58
J40
J41
J307
J32
J17
J150
J146
J144
J234
J42
J141
J210
J175
J145
J61
J162
J1
J142
J143
J351
J352
J7
J3
J15
J14
J5
J4
J6

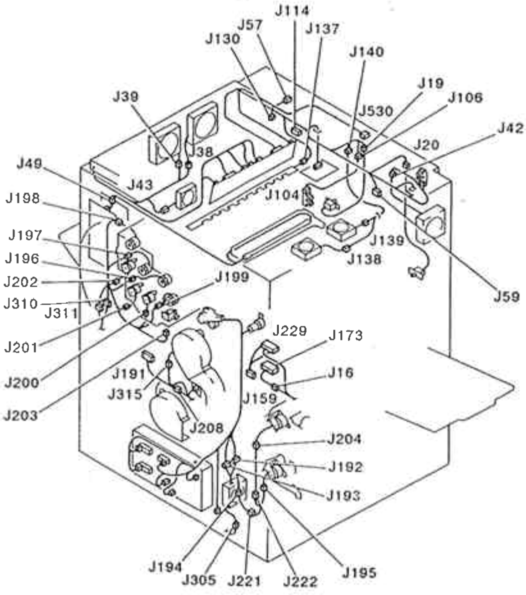
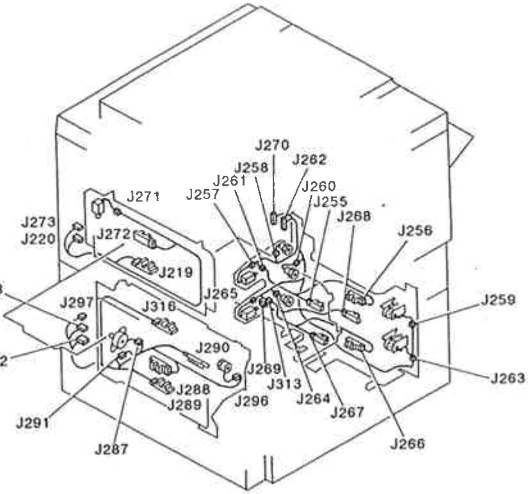

J114
J57
J137
J130
J140
J19
J39
J106
J530
J42
J20
J38
J49
J43
J104
J198
J197
J139
J196
J138
J202
J199
J59
J310
J311
J229
J173
J201
J16
J200
J191
J315
J159
J203
J208
J204
J192
J193
J194
J305
J221
J222
J195

FIGURE B LIST OF CONNECTORS (CLC950) (${}^{3}/_{5}$)
コネクタ一覧（CLC950）（${}^{3}/_{5}$）


J270
J262
J258
J261
J260
J257
J255
J271
J268
J273
J220
J272
J256
J219
J293
J265
J259
J297
J316
J290
J292
J269
J263
J313
J288
J296
J264
J289
J267
J291
J266
J287

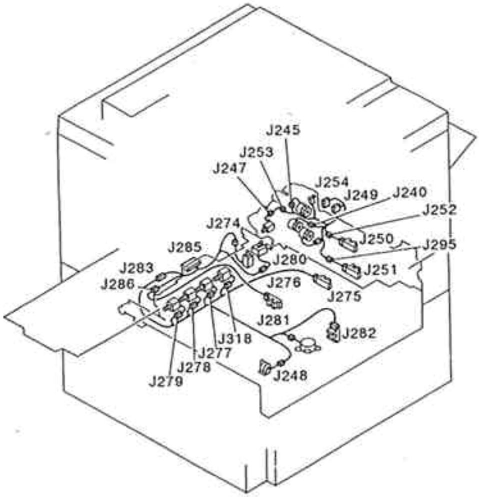

J245
J253
J247
J254
J249
J240
J252
J274
J250
J295
J285
J280
J283
J251
J286
J276
J275
J281
J282
J318
J277
J278
J248
J279

FIGURE B LIST OF CONNECTORS (CLC950) (4/5)
コネクタ一覧（CLC950）（4/5）

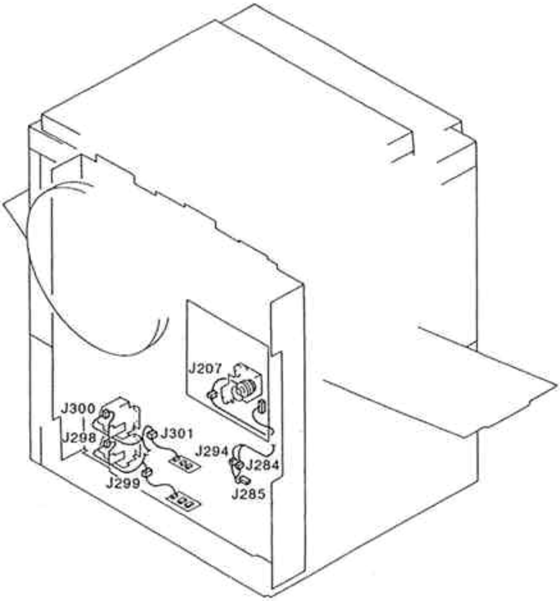
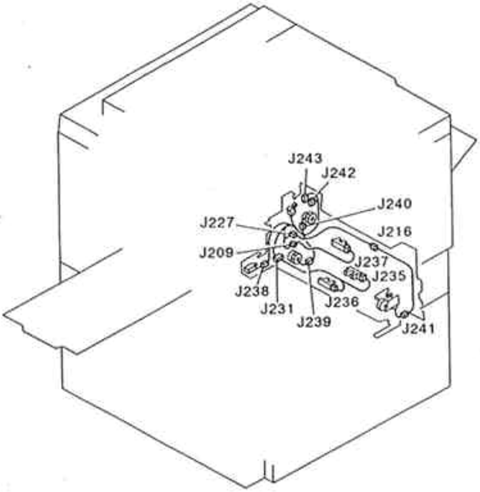
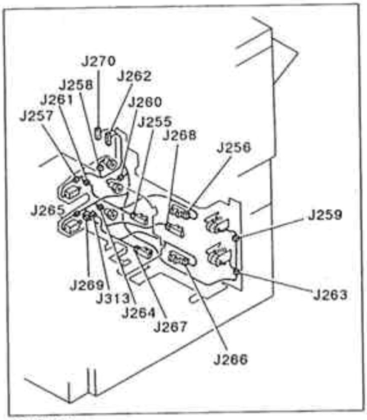

J207
J300
J298
J301
J294
J284
J299
J285

FIGURE B LIST OF CONNECTORS (CLC900/920) ($^{5}/_{5}$)
コネクター覧（CLC900／920）（$^{5}/_{5}$）


J243
J242
J240
J227
J216
J209
J237
J235
J238
J231
J236
J239
J241


J270
J262
J258
J261
J260
J257
J255
J268
J256
J265
J259
J269
J313
J264
J267
J263
J266
CLC920

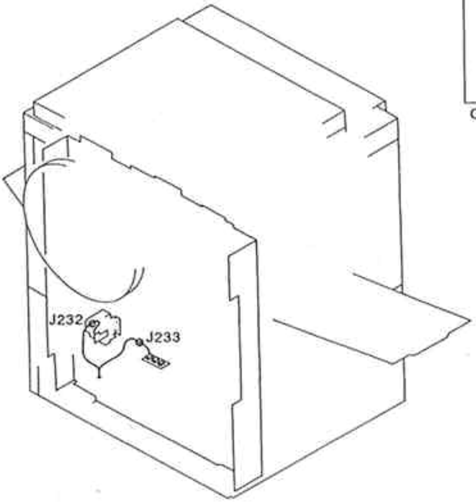


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B –	NPN		RF	LIST OF CONNECTORS コネクタ イチラン	
J 1	VS1 – 0192 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	VS1 – 0511 – 006		1	CONNECTOR, 6P, MALE コネクタ (オス)	
	WS4 – 0073 – 000		2	SOCKET CONTACT, 14 – 20AWG ソケット コンタクト	
	WS4 – 0075 – 000		2	PIN CONTACT, 14 – 20AWG ピン コンタクト	
J 2	NPN			MAIN SWITCH メイン スイッチ	SW1
	VS1 – 0511 – 004		1	CONNECTOR, 4P, MALE コネクタ (オス)	
	WS4 – 0075 – 000		4	PIN CONTACT, 14 – 20AWG ピン コンタクト	
J 3	VS4 – 0001 – 009		1	CONNECTOR, 9P, MALE コネクタ (オス)	
	VS4 – 0002 – 009		1	CONNECTOR, 9P, FEMALE コネクタ (メス)	
	WS4 – 0217 – 000		4	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
	WS4 – 0218 – 000		3	SOCKET CONTACT, 22 – 26AWG ソケット コンタクト	
	WS4 – 0219 – 000		4	PIN CONTACT, 18 – 22AWG ピン コンタクト	
	WS4 – 0220 – 000		3	PIN CONTACT, 22 – 26AWG ピン コンタクト	
J 4	VS1 – 0511 – 002		1	CONNECTOR, 2P, MALE コネクタ (オス)	
	VS3 – 0192 – 002		1	CONNECTOR, 2P, MALE コネクタ (オス)	
	WS4 – 0073 – 000		2	SOCKET CONTACT, 14 – 20AWG ソケット コンタクト	
	WS4 – 0075 – 000		2	PIN CONTACT, 14 – 20AWG ピン コンタクト	
J 5	VS1 – 5730 – 003		1	CONNECTOR, 3P, MALE コネクタ (オス)	
	VS3 – 5083 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		2	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
	WS3 – 5301 – 000		2	PIN CONTACT ピン コンタクト	
J 6	NPN			LOWER CASSETTE HEATER ゲダン カセット ヒータ	H6
	NPN			UPPER CASSETTE HEATER ジョウダン カセット ヒータ	H5
	VS4 – 0002 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS4 – 0217 – 000		2	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
J 7	VS4 – 0001 – 003		1	CONNECTOR, 3P, MALE コネクタ (オス)	
	VS4 – 0002 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS4 – 0217 – 000		2	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
	WS4 – 0220 – 000		2	PIN CONTACT, 22 – 26AWG ピン コンタクト	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B − J 8	PCB			DRUM HEATER CONTROLLER ドラムヒータ コントローラ	
	VS3 − 5083 − 005		1	CONNECTOR, 5P, FEMALE コネクタ (メス)	
	WS3 − 5160 − 000		2	SOCKET CONTACT, 18 − 24AWG ソケット コンタクト	
J 9	NPN			DRUM HEATER ドラムヒータ	H4
	PCB			DRUM HEATER CONTROLLER ドラムヒータ コントローラ	
J 10	PCB			CVR ランプ レギュレータ	
	VS3 − 5083 − 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 − 5160 − 000		2	SOCKET CONTACT, 18 − 24AWG ソケット コンタクト	
J 11	PCB			CVR ランプ レギュレータ	
	VS3 − 5083 − 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 − 5160 − 000		2	SOCKET CONTACT, 18 − 24AWG ソケット コンタクト	
J 12	PCB			CVR ランプ レギュレータ	
	VS1 − 0842 − 005		1	CONNECTOR, 5P, FEMALE コネクタ (メス)	
J 13	PCB			DCPI メイン デンゲン	
	VS3 − 5083 − 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 − 5160 − 000		2	SOCKET CONTACT, 18 − 24AWG ソケット コンタクト	
J 14	PCB			DCPI メイン デンゲン	
	VS3 − 5083 − 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS4 − 5160 − 000		4	PIN CONTACT, 18 − 22AWG ピン コンタクト	
J 15	VS4 − 0001 − 002		1	CONNECTOR, 2P, MALE コネクタ (オス)	
	VS4 − 0002 − 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS4 − 0218 − 000		2	SOCKET CONTACT, 22 − 26AWG ソケット コンタクト	
	WS4 − 0220 − 000		2	PIN CONTACT, 22 − 26AWG ピン コンタクト	
J 16	VS1 − 0279 − 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	VS1 − 0280 − 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 − 0437 − 000		4	SOCKET CONTACT, 20 − 30AWG ソケット コンタクト	
	WS3 − 0885 − 000		4	PIN CONTACT, 20 − 30AWG ピン コンタクト	
J 17	VS4 − 0001 − 004		1	CONNECTOR, 4P, MALE コネクタ (オス)	
	VS4 − 0002 − 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS4 − 0217 − 000		4	SOCKET CONTACT, 22 − 18AWG ソケット コンタクト	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 17	WS4 – 0219 – 000		4	PIN CONTACT, 18 – 22AWG ピン コンタクト	
J 18	VS4 – 0001 – 002		1	CONNECTOR, 2P, MALE コネクタ (オス)	
	VS4 – 0002 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS4 – 0217 – 000		2	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
	WS4 – 0220 – 000		2	PIN CONTACT, 22 – 26AWG ピン コンタクト	
J 19	NPN			LEFT DOOR SWITCH ヒダリ ドア スイッチ	SW4
	VS4 – 0002 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS4 – 0217 – 000		4	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
J 20	NPN			DELIVERY DOOR SWITCH ハイシ ドア スイッチ	SW5
	VS4 – 0002 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS4 – 0217 – 000		4	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
J 21	PCB			DCPI メイン デンゲン	
	VS3 – 0192 – 003		1	CONNECTOR, 3P, MALE コネクタ (オス)	
	WS4 – 0073 – 000		2	SOCKET CONTACT, 14 – 20AWG ソケット コンタクト	
J 22	PCB			DCPI メイン デンゲン	
	VS3 – 5083 – 009		1	CONNECTOR, 9P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		9	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 23	PCB			DCPI メイン デンゲン	
	VS3 – 5083 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		6	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 24	PCB			DCPI メイン デンゲン	
	VS3 – 5083 – 007		1	CONNECTOR, 7P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		7	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 25	PCB			DCPI メイン デンゲン	
	VS3 – 5083 – 008		1	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		8	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 26	PCB			DCPI メイン デンゲン	
	VS3 – 5083 – 008		1	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		8	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 27	PCB			DCPI メイン デンゲン	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 27	WS4 – 0065 – 000		1	CONNECTOR, 6P, MALE コネクタ (オス)	
	WS4 – 0075 – 000		6	PIN CONTACT, 14 – 20AWG ピン コンタクト	
J 28	PCB			DCPI メイン デンゲン	
	VS3 – 5083 – 005		1	CONNECTOR, 5P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 29	PCB			DCPI メイン デンゲン	
	VS3 – 5083 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 30	PCB			DCPI メイン デンゲン	
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J 31	PCB			LASER SCANNER MOTOR レーザ スキャナ モータ	
	VS3 – 5083 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		2	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 32	PCB			DRUM MOTOR ドラム モータ	
	VS1 – 5730 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 5301 – 000		2	PIN CONTACT ピン コンタクト	
J 33	PCB			MAIN MOTOR メイン モータ	
	VS3 – 5083 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 34	PCB			FIXER MOTOR テイチャク モータ	
	VS3 – 5083 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		2	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 35	PCB			FEED MOTOR キュウシ モータ	
	VS3 – 5083 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		2	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 36	PCB			HVT HVT	
	VS1 – 0279 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		4	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 38	NPN			OPTICAL COOLING FAN 1 ゲンコウ ロコウケイ レイキャク ファン (1)	FM1
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B − J 38	VS1 − 5057 − 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 39	NPN			OPTICAL COOLING FAN 2 ゲンコウ ロコウケイ レイキャク ファン (2)	FM5
	VS1 − 0842 − 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 − 5057 − 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 40	NPN			OPTICAL COOLING FAN 3 ゲンコウ ロコウケイ レイキャク ファン (3)	FM6
	VS1 − 0842 − 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 − 5057 − 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 41	NPN			OPTICAL COOLING FAN 4 ゲンコウ ロコウケイ レイキャク ファン (4)	FM7
	VS1 − 0842 − 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 − 5057 − 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 42	NPN			IP COOLING FAN IP レイキャク ファン	FM9
	VS1 − 0842 − 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 − 5057 − 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 43	NPN			PCB FAN 1 デンソウ ファン (1)	FM10
	VS1 − 0842 − 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 − 5057 − 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 44	NPN			EXHAUST FAN テイチャク ハイネツ ファン	FM3
	VS1 − 0842 − 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 − 5057 − 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 47	VS4 − 0002 − 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS4 − 0217 − 000		2	SOCKET CONTACT, 22 − 18AWG ソケット コンタクト	
J 48	NPN			OPTICAL MOTOR HP SENSOR ゲンコウ スキャナ ホーム ポジション センサ	PS1
	VS1 − 0842 − 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 49	FH2 − 6033 − 000		1	CORD, LAMP ランプ チュウケイ コード	
	VS4 − 0001 − 003		1	CONNECTOR, 3P, MALE コネクタ (オス)	
	WS4 − 0219 − 000		2	PIN CONTACT, 18 − 22AWG ピン コンタクト	
J 51	VS1 − 0842 − 008		2	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	VS1 − 5057 − 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 53	− − − − − −			TO OPTION RF − A1 オプション RF − A1	
	VS1 − 0842 − 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 55	VS4 – 0001 – 004		1	CONNECTOR, 4P, MALE コネクタ (オス)	
	VS4 – 0002 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS4 – 0218 – 000		4	SOCKET CONTACT, 22 – 26AWG ソケット コンタクト	
	WS4 – 0220 – 000		4	PIN CONTACT, 22 – 26AWG ピン コンタクト	
J 56	NPN			PROJECTOR SOCKET プロジェクタ ソケット	SK2
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 004		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 57	PCB			CONTROL CARD V コントロール カード V	
	VS1 – 0279 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	VS4 – 0003 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
	WS3 – 0885 – 000		4	PIN CONTACT, 20 – 30AWG ピン コンタクト	
J 58	NPN			EDITOR SOCKET エディタ ソケット	SK4
	VS1 – 0842 – 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 012		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 59	PCB			IC CARD IC カード	
	VS1 – 0279 – 008		1	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		6	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 60	PCB			BEAM DETECTOR ビーム ディテクタ	
	VS1 – 0842 – 005		1	CONNECTOR, 5P, FEMALE コネクタ (メス)	
J 61	NPN			ECONOMY SWITCH ショウエネ スイッチ	SW10
	VS1 – 0511 – 004		4	CONNECTOR, 4P, MALE コネクタ (オス)	CLC950
	WS4 – 0076 – 000		4	PIN CONTACT, 18 – 24AWG ピン コンタクト	CLC950
	VS3 – 0192 – 004		4	CONNECTOR, 4P, MALE コネクタ (オス)	CLC900/920
	WS4 – 0074 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	CLC900/920
J 62	VS4 – 0001 – 003		1	CONNECTOR, 3P, MALE コネクタ (オス)	
	VS4 – 0002 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS4 – 0217 – 000		2	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	
	WS4 – 0219 – 000		2	PIN CONTACT, 18 – 22AWG ピン コンタクト	
J 101	NPN			WASTE TONER LED SENSOR ハイトナー マンパイ センサ	PS42

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 101	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0469 – 000		2	SOCKET CONTACT, 26 – 30AWG ソケット コンタクト	
J 102	NPN			WASTE TONER LED SENSOR ハイトナー マンパイ センサ	PS42
	VS1 – 0279 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 – 0469 – 000		3	SOCKET CONTACT, 26 – 30AWG ソケット コンタクト	
J 103	NPN			ENVIRONMENT SENSOR カンキョウ センサ	UN35
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
J 104	NPN			LEFT DOOR SENSOR ヒダリ ドア センサ	PS36
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 105	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 106	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 107	NPN			M TONER ATR SENSOR M トナー ノウド センサ	ATR1
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
J 108	NPN			C TONER ATR SENSOR C トナー ノウド センサ	ATR2
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
J 109	NPN			Y TONER ATR SENSOR Y トナー ノウド センサ	ATR3
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
J 110	NPN			BK TONER ATR SENSOR BK トナー ノウド センサ	ATR4
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
J 111	VS1 – 0842 – 007		2	CONNECTOR, 7P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 007		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 112	VS1 – 0842 – 008		2	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 113	VS1 – 0842 – 006		2	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 114	VS1 – 0842 – 006		2	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 115	NPN			BK TONER SENSOR BK トナー ザンリョウ センサ	TS4

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 115	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 116	NPN			Y TONER SENSOR Y トナー ザンリョウ センサ	TS3
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 117	NPN			BK TONER SUPPLY CLUTCH BK トナー ホキュウ クラッチ	CL8
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 118	NPN			Y TONER SUPPLY CLUTCH Y トナー ホキュウ クラッチ	CL7
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 119	NPN			C TONER SENSOR C トナー ザンリョウ センサ	TS2
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 120	NPN			M TONER SENSOR M トナー ザンリョウ センサ	TS1
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 121	NPN			C TONER SUPPLY CLUTCH C トナー ホキュウ クラッチ	CL6
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 122	NPN			M TONER SUPPLY CLUTCH M トナー ホキュウ クラッチ	CL5
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 124	VS1 – 0842 – 008		2	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 125	VS1 – 0842 – 008		2	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 126	VS1 – 0842 – 012		2	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 012		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 127	VS1 – 0842 – 012		2	CONNECTOR, 12P, FEMALE コネクタ (メス)	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 127	VS1 – 5057 – 012		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 128	NPN			HOPPER MOTOR ホッパ モータ	M8
	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 129	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS4 – 0004 – 002		1	CONNECTOR, 2P, FEMALE, BK コネクタ (メス)	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
	WS3 – 0885 – 000		2	PIN CONTACT, 20 – 30AWG ピン コンタクト	
J 130	NPN			PRIMARY CLEANING MOTOR 1ジ ワイヤ セイソウ モータ	M7
	VS3 – 0108 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0885 – 000		2	PIN CONTACT, 20 – 30AWG ピン コンタクト	
J 131	NPN			RECIPROCATING MOTOR クリ－ナブ レシプロ モータ	M9
	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 132	NPN			RIGHT DOOR SENSOR ミギ ドア センサ	PS35
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 134	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 135	NPN			MAIN SWITCH メイン スイッチ	SW1
	NPN			KEY SWITCH キー スイッチ	SW2
	VS1 – 0279 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	VS4 – 0003 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	115/120V
	WS3 – 0437 – 000		4	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
	WS3 – 0885 – 000		4	PIN CONTACT, 20 – 30AWG ピン コンタクト	115/120V
J 136	NPN			COUNTER 4 カウンタ (4)	CNT4
	NPN			COUNTER 3 カウンタ (3)	CNT3
	NPN			COUNTER 2 カウンタ (2)	CNT2
	NPN			COUNTER 1 カウンタ (1)	CNT1
	VS1 – 0279 – 005		1	CONNECTOR, 5P, FEMALE コネクタ (メス)	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 136	WS3 – 0437 – 000		5	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 137	NPN			FRONT PRE EXPOSER LAMP マエ ロコウ ランプ	LA2
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J 138	NPN			CONVER FAN 2 ハンソウ ファン (2)	FM15
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J 139	NPN			CONVER FAN 1 ハンソウ ファン (1)	FM14
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J 140	VS1 – 0842 – 004		2	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 004		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 141	NPN			UPPER 1 LIFTER MOTOR カセット 1 リフタ モータ	M12
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 142	NPN			UPPER 1 PICK – UP CLUTCH カセット 1 キュウシ クラッチ	CL13
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 143	NPN			UPPER 1 PICK – UP SOLENOID カセット 1 キュウシ ソレノイド	SL16
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 144	NPN			UPPER 1 LIFTER SENSOR カセット 1 リフタ センサ	PS15
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 145	NPN			UPPER 1 PAPER SENSOR カセット 1 カミ センサ	PS16
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 146	NPN			MAIN MOTOR メイン モータ	M4
	VS1 – 0842 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
J 147	NPN			LASER SCANNER MOTOR レーザ スキャナ モータ	M3
	VS1 – 0842 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
J 148	NPN			DELIVERY DOOR SENSOR ハイシ ドア センサ	PS37
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 149	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 150	VS1 – 0842 – 014		2	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 014		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 151	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 152	NPN			OIL SENSOR テイチャク オイル ザンリョウ センサ	220V PS9
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	220V
J 153	NPN			WEB SENSOR テイチャク ウェブ ザンリョウ センサ	240V PS10
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	240V
J 154	NPN			WEB DRIVE SOLENOID テイチャク ウェブ カイジョ ソレノイド	SL5
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 155	NPN			LOWER HEATER THERMISTER テイチャク シタ サーミスタ	THM2
	VS4 – 0003 – 003		1	CONNECTOR, 3P, MALE コネクタ (オス)	
	WS3 – 5016 – 000		3	PIN CONTACT, 30 – 26AWG ピン コンタクト	
J 156	NPN			UPPER HEATER THERMISTER テイチャク ウエ サーミスタ	THM1
	VS1 – 0279 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 – 0469 – 000		3	SOCKET CONTACT, 26 – 30AWG ソケット コンタクト	
J 157	NPN			INNER DELIVERY SENSOR ウチ ハイシ センサ	PS11
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 158	NPN			WEB ROLL SOLENOID テイチャク ウェブ マキトリ ソレノイド	SL6
	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0469 – 000		2	SOCKET CONTACT, 26 – 30AWG ソケット コンタクト	
J 159	NPN			SSR 1 SSR (1)	SSR1
	VS1 – 0511 – 004		1	CONNECTOR, 4P, MALE コネクタ (オス)	220/240V
	VS3 – 0192 – 004		1	CONNECTOR, 4P, MALE コネクタ (オス)	115/120V
	WS4 – 0073 – 000		4	SOCKET CONTACT, 14 – 20AWG ソケット コンタクト	115/120V
	WS4 – 0075 – 000		4	PIN CONTACT, 14 – 20AWG ピン コンタクト	220/240V
J 160	NPN			BRUSH DRIVE MOTOR ブラシ ダッチャク モータ	M11

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 160	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 161	NPN			PRE – TRANSFER JAM SOLENOID ブンリ コロ オシアゲ ソレノイド	SL7
	VS1 – 0279 – 002		2	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0469 – 000		2	SOCKET CONTACT, 26 – 30AWG ソケット コンタクト	
J 162	NPN			TRANSFER REAR SENSOR テンシャ ウシロ カミ センサ	PS5
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 163	NPN			TRANSFER FRONT SENSOR テンシャ マエ カミ センサ	PS4
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 164	NPN			BRUSH MOTOR HP SENSOR ブラシ ダッチャク モータ HP センサ	PS7
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 165	NPN			A SIZE SENSOR A メン センサ	PS2
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 166	NPN			B SIZE SENSOR B メン センサ	PS3
	VS1 – 0192 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 167	NPN			SEPARATE SENSOR ブンリ センサ	PS6
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 168	VS1 – 0279 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 0469 – 000		6	SOCKET CONTACT, 26 – 30AWG ソケット コンタクト	
J 169	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 170	VS1 – 0279 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	VS4 – 0003 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		4	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
	WS3 – 0885 – 000		4	PIN CONTACT, 20 – 30AWG ピン コンタクト	
J 171	VS1 – 0842 – 008		2	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B - J 172	VS1 - 0842 - 007		2	CONNECTOR, 7P, FEMALE コネクタ (メス)	
	VS1 - 5057 - 007		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 173	NPN			TRANSFER DRUM DRAWER CONNECTOR テンシャ ドラム コネクタ	
	VS1 - 0842 - 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	VS1 - 0852 - 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	VS3 - 5124 - 020		1	CONNECTOR, 20P, FEMALE コネクタ (メス)	
	VS9 - 5007 - 020		1	HOLDER, CONNECTOR, 20P コネクタ ホルダ	
	WS3 - 5304 - 000		4	CONTACT SOCKET コンタクト	
J 174	NPN			TRANSFER DRUM DRAWER CONNECTOR テンシャ ドラム コネクタ	
	VS1 - 0842 - 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	VS1 - 0852 - 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	VS3 - 5125 - 020		1	CONNECTOR, 20P, FEMALE コネクタ (メス)	
	VS9 - 5007 - 020		1	HOLDER, CONNECTOR, 20P コネクタ ホルダ	
	WS3 - 5306 - 000		4	SOCKET CONTACT, 20 - 24AWG ソケット コンタクト	
J 175	VS1 - 0842 - 006		2	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	VS1 - 5057 - 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 176	NPN			PRE - REGIST LED SENSOR レジスト カミ センサ	PS41
	VS1 - 0842 - 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 177	NPN			PRE - REGIST LED SENSOR レジスト カミ センサ	PS41
	VS1 - 0842 - 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J 178	NPN			OHP SENSOR OHP センサ	PS40
	VS1 - 0842 - 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J 179	NPN			OHP SENSOR OHP センサ	PS40
	VS1 - 0842 - 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 180	NPN			REGIST ROLLER 1 DRIVE CLUTCH レジスト マエ ローラ 1 クドウ クラッチ	CL10
	VS1 - 0842 - 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 - 5057 - 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 181	NPN			REGIST ROLLER 2 DRIVE CLUTCH レジスト マエ ローラ 2 クドウ クラッチ	CL11
	VS1 - 0842 - 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 - 5057 - 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 182	NPN			MULTI FEED SENSOR マルチ フィーダ キュウシ センサ	PS8
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 183	NPN			SEPARATE CLAW DRIVE SOLENOID ブンリヅメ クドウ ソレノイド	SL8
	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0409 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 184	NPN			REGIST ROLLER DRIVE CLUTCH レジスト ローラ クドウ クラッチ	CL9
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 185	NPN			OIL POMP DRIVE SOLENOID オイル ポンプ クドウ ソレノイド	SL12
	VS4 – 0002 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS4 – 0218 – 000		2	SOCKET CONTACT, 22 – 26AWG ソケット コンタクト	
J 186	NPN			TRANSFER DRUM CLEANING MOTOR テンシャ ドラム クリーナ モータ	M10
	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 187	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 188	VS1 – 0842 – 002		2	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 189	VS1 – 0842 – 005		2	CONNECTOR, 5P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 005		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 190	VS1 – 0842 – 007		1	CONNECTOR, 7P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 007		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 191	NPN			OIL REMOVE ROLLER SOLENOID オイル カイジョ ローラ ソレノイド	SL11
	VS3 – 0308 – 032		1	HOUSING, 32P ハウジング	
	VS3 – 0309 – 032		1	CONNECTOR, 32P パネル コネクタ	
	WS3 – 1271 – 000		32	CONTACT コンタクト	
	WS3 – 1272 – 000		28	SOCKET CONTACT, 24 – 28AWG ソケット コンタクト	
	WS3 – 5217 – 000		4	SOCKET CONTACT, 20 – 24AWG ソケット コンタクト	
J 192	VS1 – 0842 – 014		2	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 014		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 193	VS1 – 0842 – 015		2	CONNECTOR, 15P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 015		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 194	VS1 – 0279 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	VS4 – 0003 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		4	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
	WS3 – 0885 – 000		4	PIN CONTACT, 20 – 30AWG ピン コンタクト	
J 195	NPN			TRANSFER CLEANING SOLENOID テンシャ ドラム クリーナ ソレノイド	SL14
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 196	NPN			SLEEVE DRIVE M CLUTCH ゲンゾウ M シリンダ クラッチ	CL1
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 197	NPN			SLEEVE DRIVE C CLUTCH ゲンゾウ C シリンダ クラッチ	CL2
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 198	NPN			SLEEVE DRIVE Y CLUTCH ゲンゾウ Y シリンダ クラッチ	CL3
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 199	NPN			SLEEVE DRIVE BK CLUTCH ゲンゾウ BK シリンダ クラッチ	CL4
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 200	NPN			M DEVELOPER PRESS SOLENOID M ゲンゾウキ カアツ ソレノイド	SL1
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 201	NPN			C DEVELOPER PRESS SOLENOID C ゲンゾウキ カアツ ソレノイド	SL2
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 202	NPN			Y DEVELOPER PRESS SOLENOID Y ゲンゾウキ カアツ ソレノイド	SL3
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 203	NPN			BK DEVELOPER PRESS SOLENOID BK ゲンゾウキ カアツ ソレノイド	SL4
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 204	NPN			TRANSFER DRUM SWING SOLENOID テンシャ ドラム ダッチャク ソレノイド	SL13
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 205	NPN			UPPER CASSETTE PAPER SENSOR VR カセット カミハバ ケンチ VR	SVR1
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 206	NPN			PRIMARY FAN 1 1ジ タイデンキ ハイキ ファン (1)	FM2
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J 207	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	NPN			DUPLEX DRIVE CLUTCH リョウメン クドウ クラッチ	CLC950 CL22
J 208	NPN			OZONE FAN 1 オゾン キュウイン ファン (1)	FM4
	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 209	VS1 – 0842 – 002		2	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 210	NPN			WASTE TONER CLOGGING SWITCH スクリュ ロック ケンチ スイッチ	MS4
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 211	NPN			REGIST ROLLER REMOVE SOLENOID レジスト ローラ カアツ カイジョ ソレノイド	SL9
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 212	NPN			ATTRACT. GUIDE DRIVE SOLENOID キュウチャク ガイド クドウ ソレノイド	SL10
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 213	NPN			MULTI FEEDER PICK – UP CLUTCH マルチ フィーダ キュウシ クラッチ	CL12
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 214	NPN			MULTI FEEDER PICK – UP SOLENOID マルチ フィーダ キュウシ ソレノイド	SL15

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 214	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 215	NPN			MULTI FEEDER PAPER SENSOR マルチ フィーダ カミ センサ	PS14
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 216	VS1 – 0842 – 002		2	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 217	VS1 – 0842 – 011		2	CONNECTOR, 11P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 011		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 218	NPN			MULTI FEEDER PAPER SENSOR VR マルチ フィーダ カミハバ ケンチ VR	MFSVR
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 219	NPN			OUTER DELIVERY SENSOR ソト ハイシ センサ	PS27
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 220	VS1 – 0842 – 004		2	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 004		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 221	VS1 – 0842 – 002		2	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 222	VS1 – 0842 – 002		2	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 223	PCB			HVT HVT	
	VS1 – 0842 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	
J 224	PCB			HVT HVT	
	VS3 – 0044 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 – 0916 – 000		3	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 225	PCB			POTENTIAL MEASURING デンイ ソクテイ	
	VS3 – 0044 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 – 0916 – 000		3	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 226	PCB			POTENTIAL MEASURING デンイ ソクテイ	
	VS1 – 0279 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		3	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 227	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 228	NPN			FIXER MOTOR テイチャク モータ	M5
	VS1 – 0842 – 005		1	CONNECTOR, 5P, FEMALE コネクタ (メス)	
J 229	NPN			FIXER DRAWER CONNECTOR テイチャクキ コネクタ	
	VS1 – 0842 – 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	VS3 – 5124 – 020		1	CONNECTOR, 20P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 020		1	HOLDER, CONNECTOR, 20P コネクタ ホルダ	
	WS3 – 5303 – 000		4	PIN CONTACT, 16 – 20AWG ピン コンタクト	
J 230	NPN			UPPER HEATER SWITCH テイチャク ウエ ヒータ サーモ スイッチ	THS2
	NPN			LOWER HEATER テイチャク シタ ヒータ	H2
	NPN			LOWER HEATER SWITCH テイチャク シタ ヒータ サーモ スイッチ	THS3
	NPN			UPPER HEATER テイチャク ウエ ヒータ	H1
	VS1 – 0842 – 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	VS3 – 5125 – 020		1	CONNECTOR, 20P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 020		1	HOLDER, CONNECTOR, 20P コネクタ ホルダ	
	WS3 – 5305 – 000		4	SOCKET CONTACT, 16 – 20AWG ソケット コンタクト	
J 231	VS1 – 0842 – 006		2	CONNECTOR, 6P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 232	NPN			MIDDLE 2 WIDTH SENSOR VR カセット 2 カミハバ ケンチ VR	CLC900/920 SVR2
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 233	NPN			CASSETTE 2 LENGTH SENSOR UNIT カセット 2 カミナガ センサ ユニット	CLC900/920 MS1
	VS1 – 0842 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 004		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 234	NPN			DRUM HOME POSITION カンコウ ドラム ホーム ポジション	PS38
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J 235	NPN			CASSETTE 2 LIFTER SENSOR カセット 2 リフタ センサ	CLC900/920 PS17

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 235	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC900/920
J 236	NPN			CASSETTE 2 PAPER SENSOR カセット 2 カミ センサ	CLC900/920 PS18
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC900/920
J 237	NPN			VERTICAL PATH 1A SENSOR キュウシ タテパス 1A センサ	CLC900/920 PS19
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC900/920
J 238	NPN			CASSETTE 2 PICK – UP SOLENOID カセット 2 キュウシ ソレノイド	CLC900/920 SL17
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 239	NPN			CASSETTE 2 PICK – UP CLUTCH カセット 2 キュウシ クラッチ	CLC900/920 CL14
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 240	NPN			VERTICAL PATH ROLLER 1 CLUTCH キュウシ タテパス ローラ 1 クラッチ	CLC900/920 CL15
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 241	NPN			CASSETTE 2 LIFTER MOTOR カセット 2 リフタ モータ	CLC900/920 M13
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 242	VS1 – 0842 – 009		2	CONNECTOR, 9P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 009		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 243	NPN			CASSETTE 2 PICK – UP DOOR SWITCH カセット 2 キュウシブ ドア スイッチ	CLC900/920 SW6
	VS1 – 0842 – 010		2	CONNECTOR, 10P, FEMALE コネクタ (メス)	CLC900/920
	VS1 – 5057 – 010		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC900/920
J 244	NPN			REFEED PICK – UP CLUTCH リョウメン キュウシ クラッチ	CLC950 CL19
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 245	NPN			VERTICAL PATH ROLLER 1 CLUTCH キュウシ タテパス ローラ 1 クラッチ	CLC950 CL20
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 246	NPN			VERTICAL PATH ROLLER 2 CLUTCH キュウシ タテパス ローラ 2 クラッチ	CLC950 CL21
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 246	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 247	NPN			REFEED PICK – UP SOLENOID リョウメン キュウシ ソレノイド	CLC950 SL21
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 248	NPN			PAPER LOADER SHEET SOLENOID カール オサエ シート ソレノイド	CLC950 SL28
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 249	VS1 – 0842 – 009		2	CONNECTOR, 9P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 009		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 250	NPN			VERTICAL PATH 1B SENSOR キュウシ タテパス 1B センサ	CLC950 PS26
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 251	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	NPN			VERTICAL PATH 2 SENSOR キュウシ タテパス 2 センサ	CLC950 PS24
J 252	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 253	VS1 – 0842 – 002		2	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 254	VS1 – 0842 – 010		2	CONNECTOR, 10P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			REFEED DOOR SWITCH リョウメン キュウシブ ドア スイッチ	CLC950 SW8
J 255	NPN			CASSETTE 3 PAPER SENSOR カセット 3 カミ センサ	CLC920/950 PS22
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC920/950
J 256	NPN			CASSETTE 3 LIFTER SENSOR カセット 3 リフタ センサ	CLC920/950
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC920/950
	NPN			CASSETTE 3 LIFTER SENSOR カセット 3 リフタ センサ	PS20
J 257	NPN			CASSETTE 3 PICK – UP SOLENOID カセット 3 キュウシ ソレノイド	CLC920/950 SL18
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC920/950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 258	NPN			CASSETTE 3 PICK – UP CLUTCH カセット 3 キュウシ クラッチ	CLC920/950 CL16

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B － J 258	VS1 － 0842 － 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 259	NPN			CASSETTE 3 LIFTER MOTOR カセット 3 リフタ モータ	CLC920/950 M14
	VS1 － 0842 － 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 260	NPN			VERTICAL PATH ROLLER 3 CLUTCH キュウシ タテパス ローラ 3 クラッチ	CLC920/950 CL18
	VS1 － 0842 － 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 261	VS1 － 0842 － 006		2	CONNECTOR, 6P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 262	VS1 － 0842 － 014		2	CONNECTOR, 14P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 012		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 263	NPN			CASSETTE 4 LIFTER MOTOR カセット 4 リフタ モータ	CLC920/950 M15
	VS1 － 0842 － 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 264	NPN			CASSETTE 4 PICK － UP CLUTCH カセット 4 キュウシ クラッチ	CLC920/950 CL17
	VS1 － 0842 － 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 265	NPN			CASSETTE 4 PICK － UP SOLENOID カセット 4 キュウシ ソレノイド	CLC920/950 SL19
	VS1 － 0842 － 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 266	NPN			CASSETTE 4 LIFTER SENSOR カセット 4 リフタ センサ	CLC920/950 PS21
	VS1 － 0842 － 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC920/950
J 267	NPN			CASSETTE 4 PAPER SENSOR カセット 4 カミ センサ	CLC920/950 PS23
	VS1 － 0842 － 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC920/950
J 268	NPN			VERTICAL PATH 3 SENSOR キュウシ タテパス 3 センサ	CLC920/950 PS25
	VS1 － 0842 － 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC920/950
J 269	VS1 － 0842 － 003		2	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC920/950
	VS1 － 5057 － 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 270	VS1 － 0842 － 015		2	CONNECTOR, 15P, FEMALE コネクタ（メス）	CLC920/950

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 270	VS1 – 5057 – 015		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 271	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			DELIVERY FLAPPER SOLENOID ハイシ カミ ヘンコウバン クドウ ソレノイド	CLC950 SL20
J 272	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			VERTICAL PASS 1 SENSOR ハイシ カミパス 1 センサ	CLC950 PS28
J 273	VS1 – 0842 – 005		2	CONNECTOR, 5P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 005		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 274	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			SWEEPER ROLLER SOLENOID リョウメン カミオクリ ローラ ソレノイド	CLC950 SL22
J 275	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	NPN			DUPLEX PAPER SENSOR リョウメン セキサイブ カミ センサ	CLC950 PS32
J 276	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			DUPLEX SMALL SIZE SENSOR リョウメン ハンソウブ カミ センサ	CLC950 PS33
J 277	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			S DUPLEX FLAPPER SOLENOID S カミ ヘンコウバン クドウ ソレノイド	CLC950 SL25
J 278	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			M DUPLEX FLAPPER SOLENOID M カミ ヘンコウバン クドウ ソレノイド	CLC950 SL24
J 279	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			L DUPLEX FLAPPER SOLENOID L カミ ヘンコウバン クドウ ソレノイド	CLC950 SL23
J 280	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			DUPLEX SHUTTER DRIVE SOLENOID リョウメン ストッパイタ クドウ ソレノイド	CLC950 SL27
J 281	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	CLC950

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 281	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			DUPLEX JAGGING DRIVE MOTOR カミ ソロエ ガイド クドウ モータ	CLC950 M16
J 282	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	NPN			DUPLEX JAGGING HP SENSOR カミ ソロエ ガイド ホーム ポジション センサ	CLC950 PS34
J 283	VS1 – 0842 – 008		2	CONNECTOR, 8P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 284	VS1 – 0842 – 014		2	CONNECTOR, 14P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 014		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 285	VS3 – 0308 – 032		1	HOUSING, 32P ハウジング	CLC950
	VS3 – 0309 – 032		1	CONNECTOR, 32P パネル コネクタ	CLC950
	WS3 – 1271 – 000		28	CONTACT コンタクト	CLC950
	WS3 – 1272 – 000		28	SOCKET CONTACT, 24 – 28AWG ソケット コンタクト	CLC950
	WS3 – 5216 – 000		2	PIN CONTACT, 20 – 24AWG ピン コンタクト	CLC950
	WS3 – 5217 – 000		2	SOCKET CONTACT, 20 – 24AWG ソケット コンタクト	CLC950
	NPN			REFEED DOOR SWITCH リョウメンブ ドア スイッチ	CLC950 SW9
J 286	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	VS4 – 0002 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	WS4 – 0217 – 000		2	SOCKET CONTACT, 22 – 18AWG ソケット コンタクト	CLC950
	NPN			DUPLEX HEATER リョウメン セキサイブ ヒータ	CLC950 H3, THS4
J 287	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			REVERSE SWITCH BACK MOTOR リョウメン ハンテンブ バック モータ	CLC950 M17
J 288	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			REVERSE FRONT SENSOR リョウメン ハンテン マエ カミ センサ	CLC950 PS29
J 289	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	NPN			REVERSE REAR SENSOR リョウメン ハンテン ウシロ カミ センサ	CLC950 PS30
J 290	NPN			REVERSE EXIT SENSOR リョウメン ハンテン デグチ カミ センサ	CLC950
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	CLC950
	NPN			REVERSE EXIT SENSOR リョウメン ハンテン デグチ カミ センサ	PS31

FIGURE & KEY NO	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 291	VS1 – 0842 – 003		2	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 292	VS1 – 0842 – 008		2	CONNECTOR, 8P, FEMALE コネクタ（メス）	CLC950
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			REVERSE DOOR SWITCH リョウメン ハンテンブ ドア スイッチ	CLC950 SW7
J 293	VS1 – 0842 – 009		1	CONNECTOR, 9P, FEMALE コネクタ（メス）	CLC950
	VS1 – 5057 – 009		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 294	VS1 – 0842 – 015		2	CONNECTOR, 15P, FEMALE コネクタ（メス）	CLC950
	VS1 – 5057 – 015		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 295	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 296	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	CLC950
	NPN			REVERSE DRIVE CLUTCH ハンテン クドウ クラッチ	CLC950 CL23
J 297	VS1 – 0842 – 005		2	CONNECTOR, 5P, FEMALE コネクタ（メス）	CLC950
	VS1 – 5057 – 005		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 298	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC950
	VS1 – 5057 – 003		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
	NPN			CASSETTE 4 WIDTH SENSOR VR カセット 4 カミハバ ケンチ VR	CLC950 SVR4
J 299	VS1 – 0842 – 004		1	CONNECTOR, 4P, FEMALE コネクタ（メス）	CLC950
	NPN			CASSETTE 4 LENGTH SENSOR カセット 4 カミナガ センサ	CLC950 MS3
J 300	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC950
	NPN			CASSETTE 3 WIDTH SENSOR VR カセット 3 カミハバ ケンチ VR	CLC950 SVR3
J 301	VS1 – 0842 – 004		1	CONNECTOR, 4P, FEMALE コネクタ（メス）	CLC950
	NPN			CASSETTE 3 LENGTH SENSOR カセット 3 カミナガ センサ	CLC950 MS2
J 302	NPN			DEVELOPING BIAS COOLING FAN ゲンゾウ バイアス レイキャク ファン	FM12
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	
J 303	NPN			GRIND ROLLER DRIVE MOTOR ケンマ ローラ クドウ モータ	M18
	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 304	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J 304	VS3 – 0108 – 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
	WS3 – 0885 – 000		2	PIN CONTACT, 20 – 30AWG ピン コンタクト	
J 306	NPN			PRIMARY FAN 2 1ジ タイデンキ ハイキ ファン (2)	FM16
	VS1 – 0279 – 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	
	WS3 – 0469 – 000		2	SOCKET CONTACT, 26 – 30AWG ソケット コンタクト	
J 307	NPN			DRUM MOTOR ドラム モータ	M2
	VS1 – 0842 – 008		1	CONNECTOR, 8P, FEMALE コネクタ（メス）	
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 308	NPN			FEED MOTOR キュウシ モータ	M6
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	
J 310	VS1 – 0842 – 008		2	CONNECTOR, 8P, FEMALE コネクタ（メス）	
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 311	VS1 – 0842 – 009		2	CONNECTOR, 9P, FEMALE コネクタ（メス）	
	VS1 – 5057 – 009		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	
J 312	NPN			SSR 2 SSR (2)	SSR2
	VS3 – 0047 – 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	
	WS3 – 1160 – 000		3	SOCKET CONTACT 24 – 28AWG ソケット コンタクト	
J 313	VS1 – 0842 – 006		2	CONNECTOR, 6P, FEMALE コネクタ（メス）	CLC920/950
	VS1 – 5057 – 006		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC920/950
J 315	NPN			OZONE FAN 2 オゾン キュウイン ファン (2)	FM13
	VS1 – 0279 – 002		2	CONNECTOR, 2P, FEMALE コネクタ（メス）	
	WS3 – 0437 – 000		2	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J 316	NPN			VERTICAL PATH 2 SENSOR ハイシ タテパス 2 センサ	CLC950 PS39
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	CLC950
J 318	NPN			SS DUPLEX FLAPPER SOLENOID SS カミ ヘンコウバン クドウ ソレノイド	CLC950 SL26
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	CLC950
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	CLC950
J 351	VS1 – 0842 – 008		2	CONNECTOR, 8P, FEMALE コネクタ（メス）	
	VS1 – 5057 – 008		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B − J 352	VS1 − 0842 − 012		2	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS1 − 0842 − 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
J 601	PCB			OPTICAL MOTOR DRIVER ゲンコウ スキャナ モータ ドライバ	
	VS3 − 5083 − 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 − 5160 − 000		6	SOCKET CONTACT, 18 − 24AWG ソケット コンタクト	
J 602	PCB			OPTION MOTOR DRIVER ゲンコウ スキャナ モータ ドライバ	
	VS1 − 0842 − 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS1 − 0852 − 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS9 − 5007 − 024		1	HOLDER, CONNECTOR, 24P コネクタ ホルダ	
J 603	NPN			OPTICAL SCANNER MOTOR ゲンコウ スキャナ モータ	M1
	PCB			OPTICAL SCANNER MOTOR DRIVER ゲンコウ スキャナ モータ ドライバ	
J 704	NPN			SSR 1 SSR (1)	SSR1
	VS3 − 0044 − 005		1	CONNECTOR, 5P, FEMALE コネクタ (メス)	
	WS3 − 0916 − 000		5	SOCKET CONTACT, 18 − 24AWG ソケット コンタクト	
J1001	PCB			DC CONTROLLER DC コントローラ	
	VS1 − 0279 − 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 − 0437 − 000		4	SOCKET CONTACT, 20 − 30AWG ソケット コンタクト	
J1002	PCB			DC CONTROLLER DC コントローラ	
	VS1 − 0842 − 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS1 − 0852 − 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS9 − 5007 − 024		1	HOLDER, CONNECTOR, 24P コネクタ ホルダ	
J1003	PCB			DC CONTROLLER DC コントローラ	
	VS1 − 0842 − 015		1	CONNECTOR, 15P, FEMALE コネクタ (メス)	
	VS1 − 0852 − 015		1	CONNECTOR, 15P, FEMALE コネクタ (メス)	
	VS9 − 5007 − 030		1	HOLDER, CONNECTOR, 30P コネクタ ホルダ	
J1004	PCB			DC CONTROLLER DC コントローラ	
	VS1 − 0279 − 009		1	CONNECTOR, 9P, FEMALE コネクタ (メス)	
	WS3 − 0437 − 000		9	SOCKET CONTACT, 20 − 30AWG ソケット コンタクト	
J1005	PCB			DC CONTROLLER DC コントローラ	
	VS1 − 0842 − 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J1005	VS1 – 0852 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 028		1	HOLDER, CONNECTOR, 28P コネクタ ホルダ	
J1006	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0279 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		4	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J1007	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0842 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 028		1	HOLDER, CONNECTOR, 28P コネクタ ホルダ	
J1008	PCB			DC CONTROLLER DC コントローラ	
	VS3 – 5083 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J1009	PCB			DC CONTROLLER DC コントローラ	
	VS3 – 5083 – 011		1	CONNECTOR, 11P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		11	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J1010	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0842 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 028		1	HOLDER, CONNECTOR, 28P コネクタ ホルダ	
J1011	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0279 – 009		1	CONNECTOR, 9P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		8	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J1012	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0279 – 009		1	CONNECTOR, 9P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		8	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J1013	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0842 – 011		1	CONNECTOR, 11P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 011		1	CONNECTOR, 11P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 022		1	HOLDER, CONNECTOR, 22P コネクタ ホルダ	
J1014	PCB			DC CONTROLLER DC コントローラ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J1014	VS1 – 0842 – 010		1	CONNECTOR, 10P, FEMALE コネクタ（メス）	
	VS1 – 0852 – 010		1	CONNECTOR, 10P, FEMALE コネクタ（メス）	
	VS9 – 5007 – 020		1	HOLDER, CONNECTOR, 20P コネクタ ホルダ	
J1015	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0842 – 012		1	CONNECTOR, 12P, FEMALE コネクタ（メス）	
	VS1 – 0852 – 012		1	CONNECTOR, 12P, FEMALE コネクタ（メス）	
	VS9 – 5007 – 024		1	HOLDER, CONNECTOR, 24P コネクタ ホルダ	
J1016	PCB			DC CONTROLLER DC コントローラ	CLC900/920
	VS1 – 0842 – 013		1	CONNECTOR, 13P, FEMALE コネクタ（メス）	CLC900/920
	VS1 – 0852 – 013		1	CONNECTOR, 13P, FEMALE コネクタ（メス）	CLC900/920
	VS9 – 5007 – 026		1	HOLDER, CONNECTOR, 26P コネクタ ホルダ	CLC900/920
J1017	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0842 – 015		1	CONNECTOR, 15P, FEMALE コネクタ（メス）	
	VS1 – 0852 – 015		1	CONNECTOR, 15P, FEMALE コネクタ（メス）	
	VS9 – 5007 – 030		1	HOLDER, CONNECTOR, 30P コネクタ ホルダ	
J1018	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0842 – 012		1	CONNECTOR, 12P, FEMALE コネクタ（メス）	
	VS1 – 0852 – 012		1	CONNECTOR, 12P, FEMALE コネクタ（メス）	
	VS9 – 5007 – 024		1	HOLDER, CONNECTOR, 24P コネクタ ホルダ	
J1019	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 1145 – 040		1	CONNECTOR, 40P, FEMALE コネクタ（メス）	
J1020	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0842 – 014		1	CONNECTOR, 14P, FEMALE コネクタ（メス）	
	VS1 – 0852 – 014		1	CONNECTOR, 14P, FEMALE コネクタ（メス）	
	VS9 – 5007 – 028		1	HOLDER, CONNECTOR, 28P コネクタ ホルダ	
J1021	PCB			DC CONTROLLER DC コントローラ	CLC950
	VS1 – 0842 – 014		1	CONNECTOR, 14P, FEMALE コネクタ（メス）	CLC950
	VS1 – 0852 – 014		1	CONNECTOR, 14P, FEMALE コネクタ（メス）	CLC950
	VS9 – 5007 – 028		1	HOLDER, CONNECTOR, 28P コネクタ ホルダ	CLC950
J1022	PCB			DC CONTROLLER DC コントローラ	CLC950

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J1022	VS1 – 0842 – 015		1	CONNECTOR, 15P, FEMALE コネクタ (メス)	CLC950
	VS1 – 0852 – 015		1	CONNECTOR, 15P, FEMALE コネクタ (メス)	CLC950
	VS9 – 5007 – 030		1	HOLDER, CONNECTOR, 30P コネクタ ホルダ	CLC950
J1023	PCB			DC CONTROLLER DC コントローラ	CLC950
	VS1 – 0842 – 013		1	CONNECTOR, 13P, FEMALE コネクタ (メス)	CLC950
	VS1 – 0852 – 013		1	CONNECTOR, 13P, FEMALE コネクタ (メス)	CLC950
	VS9 – 5007 – 026		1	HOLDER, CONNECTOR, 26P コネクタ ホルダ	CLC950
J1024	PCB			DC CONTROLLER DC コントローラ	CLC950
	VS1 – 0842 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	CLC950
	VS1 – 0852 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	CLC950
	VS9 – 5007 – 028		1	HOLDER, CONNECTOR, 28P コネクタ ホルダ	CLC950
J1031	PCB			DC CONTROLLER DC コントローラ	
	VS1 – 0842 – 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
J1034	PCB			DC CONTROLLER DC コントローラ	
J1038	PCB			DC CONTROLLER DC コントローラ	CLC950
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	CLC950
J1101	PCB			LASER CONTROLLER レーザ コントローラ	
	VS1 – 1145 – 040		1	CONNECTOR, 40P, FEMALE コネクタ (メス)	
J1102	PCB			LASER CONTROLLER レーザ コントローラ	
	VS1 – 0842 – 013		1	CONNECTOR, 13P, FEMALE コネクタ (メス)	
J1103	PCB			LASER CONTROLLER レーザ コントローラ	
	VS1 – 0842 – 005		1	CONNECTOR, 5P, FEMALE コネクタ (メス)	
J1104	PCB			LASER CONTROLLER レーザ コントローラ	
	VS3 – 5083 – 006		5	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		5	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J1105	PCB			LASER CONTROLLER レーザ コントローラ	
	VS1 – 0861 – 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
J1106	FH2 – 6021 – 000		1	CABLE, LASER DRIVER, S レーザ ドライバ コード (S)	
	PCB			LASER CONTROLLER レーザ コントローラ	
J1112	PCB			LASER CONTROLLER レーザ コントローラ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J1112	VS1 – 0842 – 012		1	CONNECTOR, 12P, FEMALE コネクタ（メス）	
J1151	PCB			DEVELOPING BIAS ゲンゾウ バイアス	
	VS1 – 0842 – 008		1	CONNECTOR, 8P, FEMALE コネクタ（メス）	
J1152	PCB			DEVELOPING BIAS ゲンゾウ バイアス	
	VS1 – 0842 – 007		1	CONNECTOR, 7P, FEMALE コネクタ（メス）	
J1153	PCB			DEVELOPING BIAS ゲンゾウ バイアス	
	VS1 – 0279 – 004		4	CONNECTOR, 4P, FEMALE コネクタ（メス）	
	WS3 – 0437 – 000		4	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J1154	PCB			DEVELOPING BIAS ゲンゾウ バイアス	
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ（メス）	
J1951	PCB			LASER DRIVER レーザ ドライバ	
	VS1 – 0842 – 012		1	CONNECTOR, 12P, FEMALE コネクタ（メス）	
J1952	FH2 – 6021 – 000		1	CABLE, LASER DRIVER, S レーザ ドライバ コード (S)	
	PCB			LASER DRIVER レーザ ドライバ	
J2001	PCB			CCD DRIVER CCD ドライバ	
	VS1 – 0861 – 013		1	CONNECTOR, 13P, FEMALE コネクタ（メス）	
J2003	PCB			CCD DRIVER CCD ドライバ	
	VS1 – 0861 – 012		1	CONNECTOR, 12P, FEMALE コネクタ（メス）	
J2501	PCB			ANALOG PROCESSOR アナログ プロセッサ	
	VS1 – 0842 – 012		1	CONNECTOR, 12P, FEMALE コネクタ（メス）	
J2502	PCB			ANALOG PROCESSOR アナログ プロセッサ	
	VS1 – 5568 – 050		1	CONNECTOR, 50P, MALE コネクタ（オス）	
J2503	PCB			ANALOG PROCESSOR アナログ プロセッサ	
	VS1 – 0842 – 013		1	CONNECTOR, 13P, FEMALE コネクタ（メス）	
J2504	PCB			ANALOG PROCESSOR アナログ プロセッサ	
	VS3 – 5083 – 008		1	CONNECTOR, 8P, FEMALE コネクタ（メス）	
	WS3 – 5160 – 000		7	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J3501	PCB			TRANSFER DRIVER テンシャ ドライバ	
	VS3 – 5083 – 004		1	CONNECTOR, 4P, FEMALE コネクタ（メス）	
	WS3 – 5160 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J3502	PCB			TRANSFER DRIVER テンシャ ドライバ	
	VS1 – 0842 – 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
J3503	PCB			TRANSFER DRIVER テンシャ ドライバ	
	VS1 – 0842 – 008		1	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 008		1	CONNECTOR, 8P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 016		1	HOLDER, CONNECTOR, 16P コネクタ ホルダ	
J3504	PCB			TRANSFER DRIVER テンシャ ドライバ	
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
J3505	PCB			TRANSFER DRIVER テンシャ ドライバ	
	VS1 – 0842 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
J3506	PCB			TRANSFER DRIVER テンシャ ドライバ	
	VS3 – 5009 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 5249 – 000		6	CONTACT, SOCKET ソケット コンタクト	
J3601	PCB			READER CONTROLLER リーダ コントローラ	
	VS1 – 0842 – 009		1	CONNECTOR, 9P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 009		1	CONNECTOR, 9P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 018		1	HOLDER, CONNECTOR, 18P コネクタ ホルダ	
J3602	PCB			READER CONTROLLER リーダ コントローラ	
	VS1 – 1145 – 100		1	CONNECTOR, 100P, FEMALE コネクタ (メス)	
J3603	PCB			READER CONTROLLER リーダ コントローラ	
	VS1 – 0842 – 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 024		1	HOLDER, CONNECTOR, 24P コネクタ ホルダ	
J3604	PCB			READER CONTROLLER リーダ コントローラ	
	VS3 – 5083 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		6	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J3605	PCB			READER CONTROLLER リーダ コントローラ	
	VS1 – 0842 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS1 – 0852 – 014		1	CONNECTOR, 14P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 028		1	HOLDER, CONNECTOR, 28P コネクタ ホルダ	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J3606	PCB			READER CONTROLLER リーダ コントローラ	
	VS1 – 1145 – 080		1	CONNECTOR, 80P, FEMALE コネクタ (メス)	
J3607	PCB			READER CONTROLLER リーダ コントローラ	
	VS1 – 0279 – 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
	WS3 – 0437 – 000		10	SOCKET CONTACT, 20 – 30AWG ソケット コンタクト	
J4007	PCB			IP MAIN イメージ プロセッサ メイン	
	VS1 – 1145 – 080		1	CONNECTOR, 80P, FEMALE コネクタ (メス)	
J4008	PCB			IP MAIN イメージ プロセッサ メイン	
	VS1 – 1145 – 060		1	CONNECTOR, 60P, FEMALE コネクタ (メス)	
J4151	PCB			IP MOTHER BOARD イメージ プロセッサ マザー	
	VS1 – 1145 – 100		1	CONNECTOR, 100P, FEMALE コネクタ (メス)	
J4152	PCB			IP MOTHER BOARD イメージ プロセッサ マザー	
	VS1 – 0842 – 012		1	CONNECTOR, 12P, FEMALE コネクタ (メス)	
	VS9 – 5007 – 024		1	HOLDER, CONNECTOR, 24P コネクタ ホルダ	
J4154	PCB			IP MOTHER BOARD イメージ プロセッサ マザー	
	VS1 – 1145 – 050		1	CONNECTOR, 50P, MALE コネクタ (オス)	
J4173	PCB			IP ED イメージ プロセッサ ED	
	VS1 – 5568 – 060		1	RECEPTACLE, 60P, MALE リセプタクル (オス)	
J4303	PCB			IP MOTHER BOARD イメージ プロセッサ マザー	
	VS3 – 5083 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J4532	PCB			IP IF イメージ プロセッサ IF	
	VS1 – 5568 – 080		1	CONNECTOR, 80P, FEMALE コネクタ (メス)	
J5001	PCB			TEN KEY BOARD テンキー	
	VS1 – 0842 – 011		1	CONNECTOR, 11P, FEMALE コネクタ (メス)	
J5002	PCB			TEN KEY BOARD テン キー	
	VS1 – 0842 – 007		1	CONNECTOR, 7P, FEMALE コネクタ (メス)	
J5003	PCB			TEN KEY BOARD テン キー	
	VS1 – 0861 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J5101	PCB			SUB KEY BOARD サブ キー	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
B – J5101	VS1 – 0861 – 006		1	CONNECTOR, 6P, MALE コネクタ（オス）	
J5102	PCB			SUB KEY BOARD サブ キー	
	VS1 – 0861 – 010		1	CONNECTOR, 10P, FEMALE コネクタ（メス）	
J5201	PCB			PILOT LAMP BOARD パイロット ランプ	
	VS1 – 0861 – 002		1	CONNECTOR, 2P, FEMALE コネクタ（メス）	
J5204	PCB			LCD PANEL エキショウ パネル	
	VS3 – 0172 – 014		1	CONNECTOR, 14P, MALE コネクタ（オス）	
	WS3 – 1141 – 000		14	SOCKET CONTACT, SEH – 001T – P0.6 ソケット コンタクト	
J5205	PCB			LCD PANEL エキショウ パネル	
	VS3 – 0172 – 004		1	CONNECTOR, 4P, MALE コネクタ（オス）	
	WS3 – 1141 – 000		2	SOCKET CONTACT, SEH – 001T – P0.6 ソケット コンタクト	
J5301	PCB			CONTROL PANEL ソウサブ	
	VS1 – 1145 – 080		1	CONNECTOR, 80P, FEMALE コネクタ（メス）	
J5302	PCB			CONTROL PANEL ソウサブ	
J5303	PCB			CONTROL PANEL ソウサブ	
	VS1 – 0842 – 011		1	CONNECTOR, 11P, FEMALE コネクタ（メス）	
J5304	PCB			CONTROL PANEL ソウサブ	
	VS1 – 0842 – 010		1	CONNECTOR, 10P, FEMALE コネクタ（メス）	
J5305	PCB			CONTROL PANEL ソウサブ	
	VS1 – 0842 – 006		1	CONNECTOR, 6P, FEMALE コネクタ（メス）	
J5308	PCB			CONTROL PANEL ソウサブ	
	VS1 – 0842 – 007		1	CONNECTOR, 7P, FEMALE コネクタ（メス）	
J5309	PCB			CONTROL PANEL ソウサブ	
	VS3 – 0172 – 014		1	CONNECTOR, 14P, MALE コネクタ（オス）	
	WS3 – 1141 – 000		14	SOCKET CONTACT, SEH – 001T – P0.6 ソケット コンタクト	
J5310	PCB			CONTROL PANEL ソウサブ	
	VS3 – 0172 – 004		1	CONNECTOR, 4P, MALE コネクタ（オス）	
	WS3 – 1141 – 000		2	SOCKET CONTACT, SEH – 001T – P0.6 ソケット コンタクト	

CLC PS BOARD UNIT - A1

CLC PS ボード ユニット-A1

100/120V	F24-6504	LHT00001 -
230V	F24-6514	UDE00001 -

目　次

－CLC PS ボード ユニット-A1－

M10.　XJ コントローラ

MB.　コネクター覧

D2.　部品索引表

CONTENTS

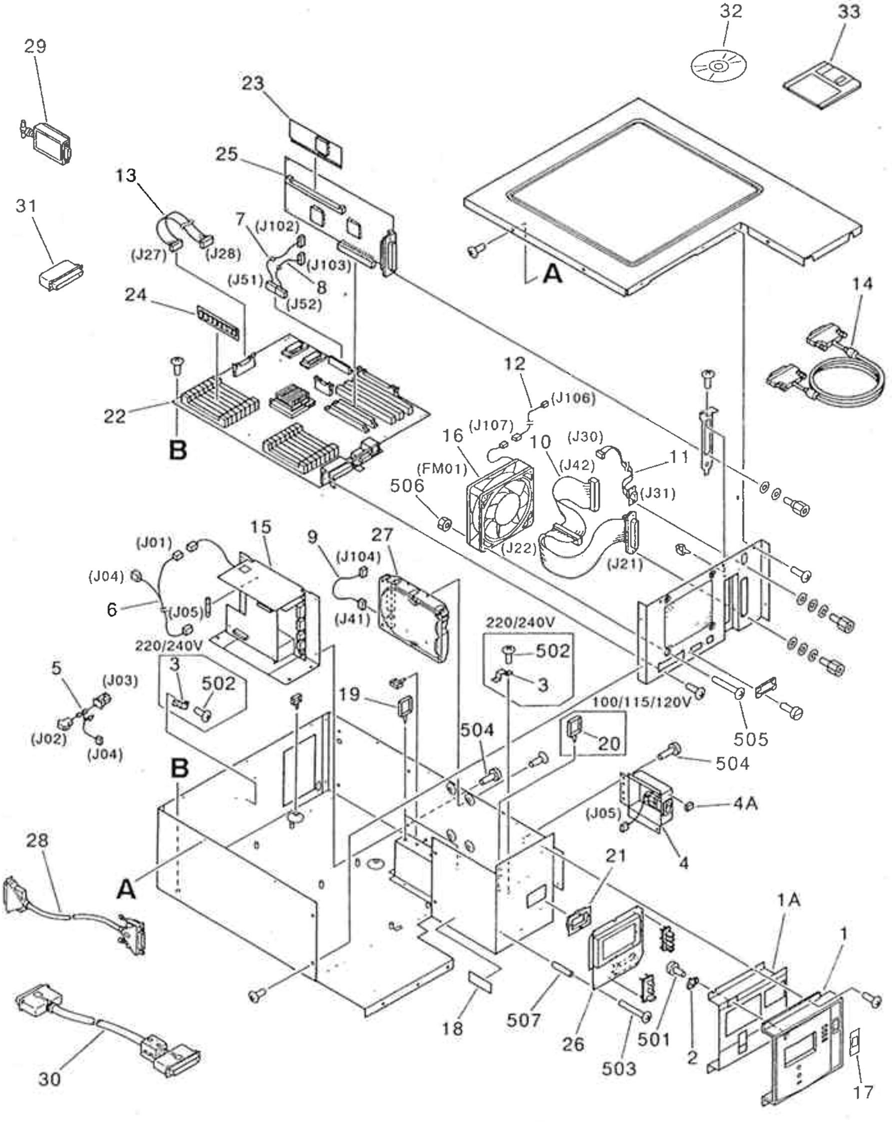
– CLC PS BOARD UNIT-A1 –

M10.　XJ CONTROLLER

MB.　LIST OF CONNECTORS

D2.　NUMERICAL INDEX

FIGURE M10 XJ CONTOROLLER
XJ コントローラ


29
23
32
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(J102)
(J27)
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8
(J51)
(J52)
A
24
14
12
(J106)
22
(J107)
16
10
(J30)
11
B
(FM01)
(J42)
506
(J31)
(J22)
(J21)
(J01)
15
9
27
(J04)
(J104)
6
(J05)
(J41)
220/240V
220/240V
502
3
502
5
(J03)
3
19
(J02)
(J04)
100/115/120V
505
504
20
B
504
(J05)
4A
28
4
21
A
1A
1
26
17
18
507
501
2
503
30

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
M10 –	NPN		RF	XJ CONTROLLER XJ コントローラ	
1	FB4 – 2725 – 000		1	COVER, PANEL パネル カバー	100/115/120V
	FF5 – 6908 – 000		1	COVER, PANEL パネル カバー	220/240V
1A	FB4 – 2749 – 000		1	SHEET, NOISE ノイズ シート	220/240V
2	FB4 – 2726 – 000		1	WINDOW, LED LED マド	
3	FB4 – 2729 – 000		2	RETAINER, SHIELD シールド オサエ	220/240V
4	FG6 – 0411 – 000		1	POWER SWITCH ASSEMBLY デンゲン スイッチ ブ	J05
4A	FB4 – 2735 – 000		1	GASKET ガスケット	
5	FG6 – 0660 – 000		1	HARNESS, AC, 1 AC ハーネス (1)	J02 – 04
6	FG6 – 0661 – 000		1	HARNESS, AC, 2 AC ハーネス (2)	J01,04,05
7	FG6 – 0663 – 000		1	HARNESS, DC, 1 DC ハーネス (1)	J51,102
8	FG6 – 0664 – 000		1	HARNESS, DC, 2 DC ハーネス (2)	J52,103
9	FG6 – 0665 – 000		1	HARNESS, DC, 3 DC ハーネス (3)	J41,104
10	FG6 – 0666 – 000		1	HARNESS, SCSI SCSI ハーネス	J21,22,42
11	FG6 – 0667 – 000		1	HARNESS, SERIAL SERIAL ハーネス	
12	FG6 – 0668 – 000		1	HARNESS, FAN ファン ハーネス	J106,107
13	FG6 – 0669 – 000		1	HARNESS, USER INTERFACE CABLE ユーザ インターフェース ボード ハーネス	100/115/120V J27,28
	FH2 – 6449 – 000		1	CABLE, SHIELD シールド ケーブル	220/240V J27,28
14	FH2 – 6450 – 000		1	CABLE, VIDEO/INTERFACE ビデオ/インターフェース ケーブル	
15	FH3 – 2505 – 000		1	SWITCHING REGULATOR スイッチング デンゲン	100/115/120V J01
	FH3 – 2506 – 000		1	SWITCHING REGULATOR スイッチング デンゲン	220/240V J01
16	FH6 – 1459 – 000		1	MOTOR モータ	FM01 J107
17	FS6 – 8491 – 000		1	LABEL, SWITCH スイッチ ラベル	
18	FS6 – 8495 – 000		1	NAME PLATE メイショウ メイハン	100/115/120V
	FS6 – 8496 – 000		1	NAME PLATE メイショウ メイハン	220/240V
19	WT2 – 0499 – 000		3	CLIP, CABLE ロッキング ワイヤ サドル	
20	WT2 – 0499 – 000		1	CLIP, CABLE ロッキング ワイヤ サドル	100/115/120V
21	WT2 – 5061 – 000		1	SUPPORT, CABLE スクエア ブッシュ	
22	FE1 – 4722 – 000		1	MOTHERBOARD PCB ASSEMBLY マザーボード カイロ キバン	
23	FE1 – 4723 – 000		1	DECOMPRESSION PCB ASSEMBLY シンチョウ キバン	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
M10 - 24	FE1 - 4528 - 000		1	SIMM, 4MB SIMM	
	FE1 - 4529 - 000		1	SIMM, 8MB SIMM	
25	FE1 - 4616 - 000		1	VIDEO BOARD PCB ASSEMBLY ビデオ ボード カイロ キバン	
26	FE1 - 4534 - 000		1	USER INTERFACE BOARD PCB ASS'Y ユーザ インターフェース カイロ キバン	
27	FE1 - 4725 - 000		1	HARD DISK DRIVE UNIT, 2.1GB ハード ディスク ドライブ	
28	FE1 - 4542 - 000		1	CABLE, CENTRONICS セントロニクス ケーブル	
29	FE1 - 4545 - 000		1	TRANSCEIVER UNIT, ETHERNET トランシーバ	
30	FE1 - 4544 - 000		1	CABLE, SCSI, COMUTER SCSI ケーブル	
31	FE1 - 4790 - 000		1	TERMINATOR, SCSI SCSI ターミネータ	
32	FE1 - 4699 - 000		1	CD - ROM,COLOR PASS 500,ROMAN CD - ROM,COLOR PASS 500,ROMAN	US ENGLISH
33	FE1 - 4703 - 000		1	CD - ROM,PS - XJ500,ROMAN CD - ROM,PS - XJ500,ROMAN	US ENGLISH
	FE1 - 4716 - 000		1	CD - ROM,PS - XJ32S CD - ROM,PS - XJ32S	JAPANESE
	FE1 - 4700 - 000		1	3.5FD DISKPACK,COLOR PASS 500 3.5FD ディスクパック COLOR PASS 500	FOR MAC US ENGLISH
	FE1 - 4701 - 000		1	3.5FD DISKPACK,COLOR PASS 500 3.5FD ディスクパック COLOR PASS 500	FOR WIN US ENGLISH
	FE1 - 4704 - 000		1	3.5FD DISKPACK,PS - XJ500 3.5FD ディスクパック PS - XJ500	FOR MAC US ENGLISH
	FE1 - 4705 - 000		1	3.5FD DISKPACK,PS - XJ500 3.5FD ディスクパック PS - XJ500	FOR WIN US ENGLISH
	FE1 - 4707 - 000		1	3.5FD DISKPACK,PS - XJ 3.5FD ディスクパック PS - XJ	FOR MAC FRENCH
	FE1 - 4708 - 000		1	3.5FD DISKPACK,PS - XJ 3.5FD ディスクパック PS - XJ	FOR WIN FRENCH
	FE1 - 4710 - 000		1	3.5FD DISKPACK,COLOR PASS 500 3.5FD ディスクパック COLOR PASS 500	FOR MAC GERMAN
	FE1 - 4711 - 000		1	3.5FD DISKPACK,COLOR PASS 500 3.5FD ディスクパック COLOR PASS 500	FOR WIN GERMAN
	FE1 - 4713 - 000		1	3.5FD DISKPACK,COLOR PASS 500 3.5FD ディスクパック COLOR PASS 500	FOR MAC ITALIAN
	FE1 - 4714 - 000		1	3.5FD DISKPACK,COLOR PASS 500 3.5FD ディスクパック COLOR PASS 500	FOR WIN ITALIAN
	FE1 - 4717 - 000		1	3.5FD DISKPACK,PS - XJ32S 3.5FD ディスクパック PS - XJ32S	FOR MAC JAPANESE
	FE1 - 4718 - 000		1	3.5FD DISKPACK,PS - XJ32S 3.5FD ディスクパック PS - XJ32S	FOR WIN JAPANESE
501	XB1 - 2300 - 607		9	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	
502	XB1 - 2300 - 607		4	SCREW,MACH.,TRUSS HEAD,M3X6 バインド ネジ	220/240V
503	XB1 - 2302 - 507		4	SCREW,MACH.,TRUSS HEAD,M3X25 バインド ネジ	
504	XB1 - 2400 - 607		AR	SCREW,MACH.,TRUSS HEAD,M4X6 バインド ネジ	
505	XB1 - 2404 - 509		4	SCREW,MACH.,TRUSS HEAD,M4X45 バインド ネジ	
506	XB7 - 2100 - 409		4	NUT,HEX,M4 ロッカク ナット	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
M10 – 507	XZ1 – 1401 – 805		4	SPACER スペーサ	

FIGURE MB LIST OF CONNECTORS
コネクタ 一覧

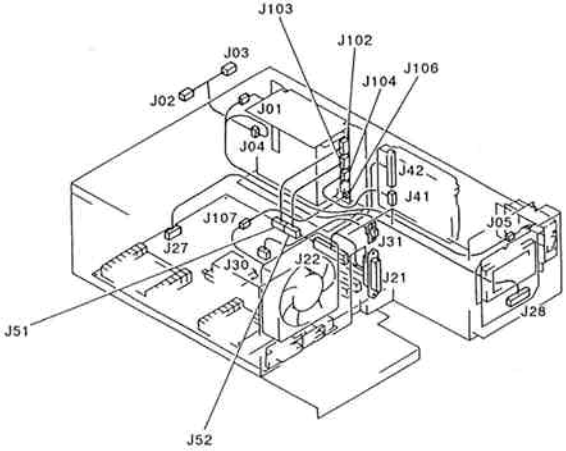

J103
J102
J03
J104
J106
J02
J01
J04
J42
J41
J107
J05
J27
J31
J30
J22
J21
J28
J51
J52

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
M B –	NPN		RF	LIST OF CONNECTORS コネクタ イチラン	
J 01	PCB			SWITCHING REGULATOR スイッチング デンゲン	
	VS3 – 5083 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		2	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 02	------			COPIA フクシャキ ホンタイ	
	VS1 – 0511 – 006		1	CONNECTOR, 6P, MALE コネクタ (オス)	
	WS3 – 1212 – 000		6	PIN CONTACT, 14 – 20AWG ピン コンタクト	
J 03	------			COPIA フクシャキ ホンタイ	
	VS3 – 0192 – 006		1	CONNECTOR, MALE コネクタ (オス)	
	WS4 – 0073 – 000		6	SOCKET CONTACT, 14 – 20AWG ソケット コンタクト	
J 04	VS1 – 5729 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	VS3 – 5083 – 003		1	CONNECTOR, 3P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		2	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
	WS3 – 5301 – 000		2	PIN CONTACT ピン コンタクト	
J 05	VS1 – 5729 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	VS3 – 5083 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
	WS3 – 5301 – 000		4	PIN CONTACT ピン コンタクト	
J 21	WS3 – 5664 – 000		1	CONNECTOR, 50P, MALE コネクタ (オス)	
J 22	VS1 – 0610 – 050		1	CONNECTOR, 50P, FEMALE コネクタ (メス)	
J 27	PCB			MOTHERBOARD マザーボード	
	VS1 – 0610 – 026		1	CONNECTOR, 26P, FEMALE コネクタ (メス)	
J 28	PCB			USER INTERFACE BOARD ユーザ インターフェース ボード	
	VS1 – 0610 – 026		1	CONNECTOR, 26P, FEMALE コネクタ (メス)	
J 30	PCB			MOTHERBOARD マザーボード	
	VS1 – 0610 – 010		1	CONNECTOR, 10P, FEMALE コネクタ (メス)	
J 31	WS1 – 5665 – 000		1	CONNECTOR, 9P, MALE コネクタ (オス)	
	WS3 – 0943 – 000		9	PIN CONTACT, 24 – 28AWG ピン コンタクト	
J 41	NPN			HARD DISK DRIVE ハード ディスク	
	WS3 – 5183 – 000		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	

FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER / REMARKS
M B – J 41	WS3 – 5184 – 000		4	PIN CONTACT, 14 – 20AWG ピン コンタクト	
J 42	NPN			HARD DISK DRIVE ハードディスク	
	VS1 – 0610 – 050		1	CONNECTOR, 50P, FEMALE コネクタ (メス)	
J 51	PCB			MOTHERBOARD マザーボード	
	VS1 – 6287 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 5531 – 000		5	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J 52	PCB			MOTHERBOARD マザーボード	
	VS1 – 6287 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 5531 – 000		5	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J102	PCB			SWITCHING REGULATOR スイッチング デンゲン	
	VS3 – 5083 – 007		1	CONNECTOR, 7P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		5	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J103	PCB			SWITCHING REGULATOR スイッチング デンゲン	
	VS3 – 5083 – 006		1	CONNECTOR, 6P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		5	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J104	PCB			SWITCHING REGULATOR スイッチング デンゲン	
	VS3 – 5083 – 004		1	CONNECTOR, 4P, FEMALE コネクタ (メス)	
	WS3 – 5160 – 000		4	SOCKET CONTACT, 18 – 24AWG ソケット コンタクト	
J106	PCB			SWITCHING REGULATOR スイッチング デンゲン	
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
J107	NPN			EXHAUST FAN ハイネツ ファン	FM01
	VS1 – 0842 – 002		1	CONNECTOR, 2P, FEMALE コネクタ (メス)	
	VS1 – 5057 – 002		1	CONNECTOR, SNAP TIGHT チュウケイ コネクタ	

C LIST OF STANDARD FASTENERS
機械標準部品一覧表

I . SCREWS C-2
  A. Machine screws (for precision use) C-3
  B. Pan head machine screws C-3
  E. Binding head machine screws C-3
  F. Flat head machine screws C-3
  G. Self-tapping screws C-3
  H. Pan head machine screws with captive spring washer C-3
  K. Washer head machine screws C-4
  L. Hex socket setscrews and socket head cap screws C-4
II . NUTS C-4
  M. Hexagon nuts C-4
III . WASHERS AND SHIM WASHERS C-5
  N. S &T. Shim washers C-5
  U. Plain Washers, spring washers & toothed lock washers C-6
IV . RETAINING RINGS C-7
  V. E rings C-7
  W. Grip rings C-7
  X. C rings C-8
V . PINS C-9
  Y. Spring and dowel pins C-9
VI . SPACERS C-9
  Z. Spacers C-9

I．ネジ C-2
  A．精密機器用小ネジ C-3
  B．ナベ小ネジ C-3
  E．バインド小ネジ C-3
  F．サラ小ネジ C-3
  G．タッピンネジ C-3
  H．バネ座金付き十字ナベ小ネジ C-3
  K．TP小ネジ C-4
  L．六角穴付き止めネジおよび六角穴付きボルト C-4
II．ナット C-4
  M．六角ナット C-4
III．ワッシャ C-5
  N．S＆T．標準ワッシャ C-5
  U．平座金、バネ座金および歯付き座金 C-6
IV．止め輪 C-7
  V．E形止め輪 C-7
  W．グリップ止め輪 C-7
  X．C形止め輪 C-8
V．ピン C-9
  Y．スプリングピンおよび平行ピン C-9
VI．スペーサ C-9
  Z．スペーサ C-9

I. SCREWS
ネジ

How to read Part Numbers
部品番号の見方

Screws (except socket head cap screws)
ネジ（六角穴付ボルトを除く）

X B 1 – 2 4 0 0 – 6 0 9

Classification symbol .... Binding head machine screw
類別番号　バインドネジ

Nominal diameter (d) M4.0
呼び径（d）

Length (ℓ) 6.0mm
長さ（ℓ）

Material and surface treatment .... Steel (black zinc plated) See table 1.
材料および表面処理　鋼材（黒色亜鉛メッキ）表1参照

Socket head cap screws
六角穴付ボルト

X B 7 – 1 0 8 0 – 4 0 9

Classification symbol .... Socket head cap screw
類別番号　六角穴付きボルト

Nominal diameter (d) M8
呼び径（d）

Length (ℓ) 40mm
長さ（ℓ）

Material and surface treatment .... Steel (black zinc plated) See table 1.
材料および表面処理　鋼材（黒色亜鉛メッキ）表1参照

Material and surface treatment

No.	Material	Surface treatment	Color
1	Stainless	Blackened	Black
2		Without surface treatment	White
3	Brass	Nickel plated	White
4		Black nickel plated	Black
5	Steel	Zinc plated	Yellow
6		Nickel and chrome plated	White
7		Nickel plated	White
8		Phosphated	Black
9		Black zinc plated	Black

Table 1

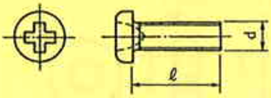
材料および表面処理

番号	材質	表面処理	色
1	ステンレス	黒着色	黒
2		なし	白
3	黄銅	ニッケルメッキ	白
4		黒色ニッケルメッキ	黒
5	鋼	亜鉛メッキ	黄
6		ニッケルクロムメッキ	白
7		ニッケルメッキ	白
8		鉄鋼燐酸塩被膜	黒
9		黒色亜鉛メッキ	黒

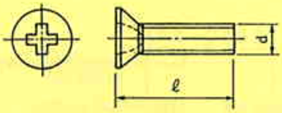
表 1

A. MACHINE SCREWS (FOR PRECISION USE)
精密機器用小ネジ

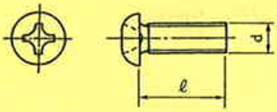
Pan head machine screws
ナベ小ネジ



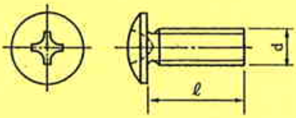
Flat head machine screws
サラ小ネジ



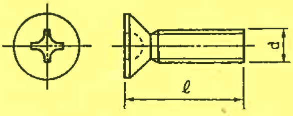
B. PAN HEAD MACHINE SCREWS
ナベ小ネジ



E. BINDING HEAD MACHINE SCREWS
バインド小ネジ

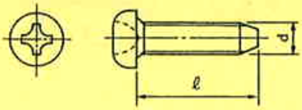


F. FLAT HEAD MACHINE SCREWS
サラ小ネジ

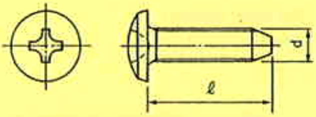


G. SELF-TAPPING SCREWS
タッピンネジ

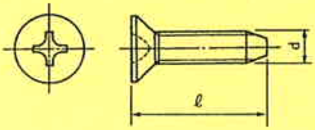
Pan head self-tapping screws
ナベタッピンネジ



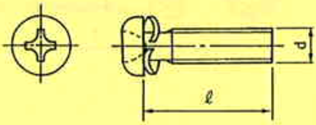
Binding head self-tapping screws
バインドタッピンネジ



Flat head self-tapping screws
サラタッピンネジ

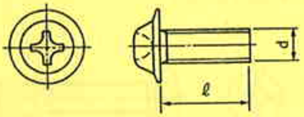


H. PAN HEAD MACHINE SCREWS WITH CAPTIVE SPRING WASHER
バネ座金付き十字ナベ小ネジ



K. WASHER HEAD MACHINE SCREWS

TP小ネジ

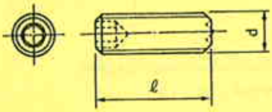


L. HEX SOCKET SETSCREWS AND SOCKET HEAD CAP SCREWS

六角穴付き止めネジおよび六角穴付きボルト

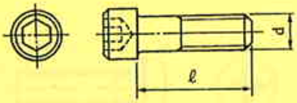
Hex socket setscrews

六角穴付き止めネジ



Socket head cap screws

六角穴付きボルト



II. NUTS

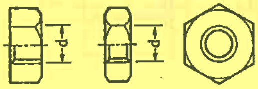
ナット

M. HEXAGON NUTS

六角ナット

class 1
1 種

class 3
3 種



How to read Part Numbers

部品番号の見方

XB7–2100–309

Nominal diameter (d) ... M3
呼び径（d）

Hexagon nut
六角ナット

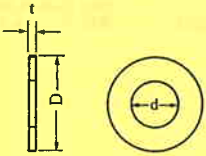
Material and surface treatment ....Steel (black zinc plated)
材料および表面処理 鋼材
（黒色亜鉛メッキ）

XB7 – 210 .... class 1
1種

XB7 – 220 .... class 3
3種

III. WASHERS AND SHIM WASHERS
ワッシャ

N, S&T. SHIM WASHERS
標準ワッシャ



How to read Part Numbers
部品番号の見方

XD1-1102-625

Shim washer
標準ワッシャ

Inner diameter (d) ... 2.6mm
内径（d）

Outer diameter (D)... Class 2 (See table 2)
外径（D） 2種（表2参照）

Thickness code (t) ... 0.5mm
板厚番号（t） See table 3
表3参照

* Material ：Brass
材　料　：黄　銅

d (mm)	D (mm)		
	Class 1 1種	Class 2 2種	Class 3 3種
1.5	–	2.6	3.2
1.8	2.7	3.1	3.7
2.1	3.2	3.6	4.2
2.3	3.6	4	4.6
2.6	4	4.4	5
3.1	4.6	5	5.6
3.6	5.4	5.8	6.4
4.1	5.7	6.6	8
4.6	6.4	7.4	9
5.2	7.2	8.2	10
5.7	7.8	9	11
6.2	8.5	9.8	12
6.7	9.2	10.5	13
7.2	10	11.4	14
7.7	10.6	12.2	15
8.2	11.4	13	16
8.7	12	13.8	17
9.2	12.8	14.6	18
9.7	13.5	15.4	19

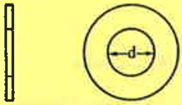
Table 2　表2

Thickness code 板厚番号	t (mm)
0	0.05
1	0.1
2	0.2
3	0.3
4	0.4
5	0.5
6	0.6
7	0.7
8	0.8
9	1

Table 3　表3

U. PLAIN WASHERS, SPRING WASHERS & TOOTHED LOCK WASHERS
平座金、バネ座金および歯付き座金

Plain washers
平座金



How to read Part Numbers
部品番号の見方

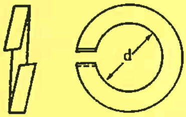
XD1－2100－307

Plain washer
平座金

Inner diameter (d) 3.0mm
呼び径（d）

Material and surface treatment .... Steel (nickel plated)
材料および表面処理　鋼材（ニッケルメッキ）

Spring washers
バネ座金



How to read Part Numbers
部品番号の見方

XD1－3100－507

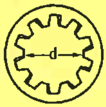
Spring washer
バネ座金

Inner diameter (d) 5.0mm
呼び径（d）

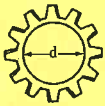
Material and surface treatment .... Steel (nickel plated)
材料および表面処理　鋼材（ニッケルメッキ）

Toothed lock washers
歯付き座金

Inner toothed type 内歯形



Outer toothed type 外歯形



How to read Part Numbers
部品番号の見方

XD1－4100－302

Toothed lock washer
歯付き座金

Inner diameter (d) 3mm
呼び径（d）

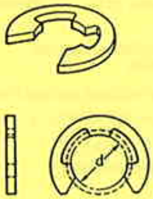
Material and surface treatment .... Stainless (without surface treatment)
材料および表面処理　ステンレス（表面処理なし）

XD1－410... Inner toothed type
内歯形

XD1－420... Outer toothed type
外歯形

IV. RETAINING RINGS
止め輪

V. E RINGS
E形止め輪



How to read Part Numbers
部品番号の見方

XD2-1100-172

E ring
E形止め輪

Inner diameter (d) 1.7mm
呼び径 (d)

Material and surface treatment
材料および表面処理

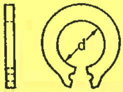
XD2 – 110... Class 1
1種

XD2 – 120... Class 2
2種

2 .... Stainless (without surface treatment)
ステンレス（表面処理なし）

7 .... Steel (nickel plated)
鋼材（ニッケルメッキ）

W. GRIP RINGS
グリップ止め輪



How to read Part Numbers
部品番号の見方

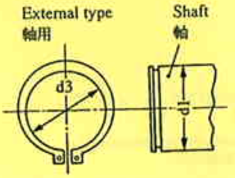
XD2-2100-502

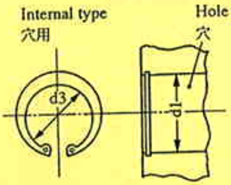
Grip ring
グリップ止め輪

Inner diameter (d) 5.0mm
呼び径 (d)

Material and surface treatment .... Stainless (without surface treatment)
材料および表面処理 ステンレス（表面処理なし）

X. C RINGS
C形止め輪





How to read Part Numbers
部品番号の見方

XD2-3100-202

C ring
C形止め輪

Nominal diameter (d1) 20mm
呼び径（d1）

Material and surface treatment
材料および表面処理

2 .... Stainless (without surface treatment)
ステンレス（表面処理なし）
8 .... Steel (phosphated)
鋼材（鉄鋼燐酸塩被膜）

XD2 – 310... External type
軸用

XD2 – 320... Internal type
穴用

External type
軸用

Nominal diameter 呼び径	d1 (mm)	d3 (mm)
010	10	9.3
012	12	11.1
014	14	12.9
015	15	13.8
016	16	14.7
017	17	15.7
018	18	16.5
020	20	18.5
022	22	20.5
025	25	23.2
028	28	25.9
030	30	27.9
032	32	29.6
035	35	32.2

Table 4　表4

Internal type
穴用

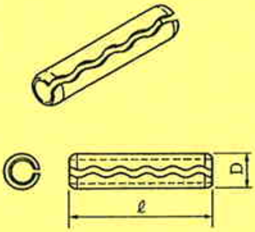
Nominal diameter 呼び径	d1 (mm)	d3 (mm)	Nominal diameter 呼び径	d1 (mm)	d3 (mm)
010	10	10.7	040	40	43.5
011	11	11.8	042	42	45.5
012	12	13	045	45	48.5
014	14	15.1	047	47	50.5
016	16	17.3	050	50	54.2
018	18	19.5	052	52	56.2
019	19	20.5	055	55	59.2
020	20	21.5	060	60	64.2
022	22	23.5	062	62	66.2
025	25	26.9	068	68	72.5
028	28	30.1	072	72	76.5
030	30	32.1	075	75	79.5
032	32	34.4	080	80	85.5
035	35	37.8	085	85	90.5
037	37	39.8	090	90	95.5
			095	95	100.5

Table 5　表5

V. PINS
ピン

Y. SPRING AND DOWEL PINS
スプリングピンおよび平行ピン

Spring pins
スプリングピン



How to read Part Numbers
部品番号の見方

XD3－1200－122

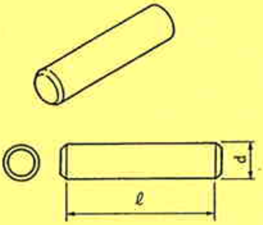
Spring pin
スプリングピン

Nominal diameter (D).... 2.0mm
呼び径 (D)

Length (ℓ)..................... 12mm
長さ (ℓ)

Material and surface treatment .... Stainless (without surface treatment)
材料および表面処理　ステンレス (表面処理なし)

Dowel pins
平行ピン



How to read Part Numbers
部品番号の見方

XD3－2200－082

Dowel pin
平行ピン

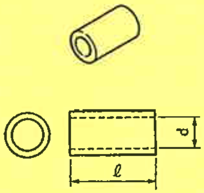
Nominal diameter (d)..... 2.0mm
呼び径 (d)

Length (ℓ)..................... 8mm
長さ (ℓ)

Material and surface treatment .... Stainless (without surface treatment)
材料および表面処理　ステンレス (表面処理なし)

VI. SPACERS
スペーサ

Z. SPACERS
スペーサ



How to read Part Numbers
部品番号の見方

XZ1－1300－305

Spacer
スペーサ

Nominal diameter (d)..... 3.0mm
呼び径 (d)

Length (ℓ)..................... 3.0mm
長さ (ℓ)

Material and surface treatment .... Steel (zinc plated)
材料および表面処理　鋼 (亜鉛メッキ)

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CK - 0061 - 000	020 - 8
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F23 - 7134 - 000	306 -
F23 - 7143 - 000	307 -
F23 - 7144 - 000	306 -
FA1 - 0056 - 000	316 - 1
	535 - 1
FA1 - 9467 - 000	580 - 2
	590 - 2
FA2 - 5606 - 000	530 - 70
	810 - 1
FA2 - 8225 - 000	120 - 1
FA2 - 8244 - 000	370 - 7
FA2 - 8361 - 000	103 - 4
	370 - 46
	535 - 2
FA2 - 9388 - 000	107 - 127
	536 - 1
	640 - 31
FA3 - 0134 - 000	160 - 1
	920 - 1
FA3 - 0136 - 050	160 - 7
	920 - 2
FA3 - 0314 - 000	535 - 3
FA3 - 0467 - 000	105 - 14
FA3 - 0652 - 000	810 - 2
FA3 - 2118 - 000	550 - 3
FA3 - 8719 - 000	106 - 33
	106 - 45
	106 - 49
	312 - 67
FA3 - 8727 - 000	312 - 1
	313 - 1
	313A - 1
	314 - 1
	315 - 1
FA3 - 8729 - 000	312 - 2
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FA3 - 8730 - 000	312 - 3
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FA3 - 9315 - 000	100 - 24
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FA4 - 0892 - 000	947 - 1
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	313A - 4
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	315 - 4
FA4 - 1159 - 000	310 - 3
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FA4 - 8874 - 000	710 - 1
FA4 - 9152 - 000	535 - 109
FA4 - 9197 - 000	820 - 1
FA4 - 9697 - 000	950 - 8
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FA5 - 0951 - 000	104 - 20A
FA5 - 0966 - 000	810 - 3
FA5 - 1523 - 000	835 - 1
FA5 - 1876 - 000	580 - 9
	590 - 9
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FA5 - 4628 - 000	315 - 102
FA5 - 4629 - 000	315 - 103
FA5 - 4630 - 000	315 - 104
FA5 - 8743 - 000	103 - 5
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FA5 - 8777 - 000	810 - 4
FA5 - 8805 - 000	810 - 7
FA5 - 8816 - 000	810 - 10
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FA5 - 9011 - 000	530 - 2
FA5 - 9055 - 000	530 - 81
FA5 - 9056 - 000	530 - 82
FA5 - 9099 - 000	580 - 5
	585 - 6
	590 - 5
FA5 - 9101 - 000	580 - 6
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FA5 - 9132 - 000	535 - 55
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	260 - 1
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FA9 - 0029 - 000	910 - 18
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	990 - 12
FA9 - 1780 - 000	106 - 41
FA9 - 1954 - 000	535 - 83
	536 - 41
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	310 - 4
	835 - 2
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FA9 - 2753 - 000	107 - 83
	300 - 44
	305 - 38
	980 - 7
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	981 - 1
FA9 - 3389 - 000	100 - 60
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	530 - 105
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FB1 - 6985 - 000	313A - 11
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	314 - 27
	315 - 11
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FB1 - 7061 - 000	312 - 26
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FB1 - 7157 - 000	100 - 40	FB2 - 0101 - 000	107 - 65	FB2 - 0298 - 000	640 - 26
FB1 - 7197 - 000	100 - 14	FB2 - 0102 - 000	108 - 27	FB2 - 0299 - 000	642 - 24
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FB1 - 8018 - 000	310 - 14	FB2 - 0131 - 000	107 - 35	FB2 - 0311 - 000	640 - 12
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	305 - 13	FB2 - 0259 - 000	430 - 16	FB2 - 0397 - 000	255 - 2
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FB1 - 8699 - 020	300 - 18	FB2 - 0262 - 000	640 - 1	FB2 - 0409 - 000	500 - 5
	305 - 14	FB2 - 0263 - 000	640 - 1	FB2 - 0410 - 000	500 - 6
FB1 - 8727 - 000	107 - 63	FB2 - 0264 - 000	640 - 1	FB2 - 0411 - 000	500 - 7
	107 - 109	FB2 - 0265 - 000	642 - 1	FB2 - 0415 - 000	500 - 12
	107 - 119	FB2 - 0268 - 000	640 - 2	FB2 - 0418 - 000	500 - 23
FB1 - 8729 - 030	107 - 60		642 - 16	FB2 - 0419 - 000	500 - 24
	107 - 110	FB2 - 0269 - 000	640 - 3	FB2 - 0421 - 000	500 - 26
	107 - 118		642 - 15	FB2 - 0428 - 020	550 - 10
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FB1 - 8761 - 000	310 - 18		642 - 28	FB2 - 0437 - 000	550 - 19B
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	590 – 8
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	260 - 10	FS2 - 0577 - 000	252 - 10	FS4 - 2356 - 000	921 - 28
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	312 - 49	FS2 - 1008 - 000	312 - 55		120 - 13
	313 - 77		313 - 83		313 - 89
	313A - 77		313A - 84		313A - 89
	314 - 76		314 - 83		314 - 88
	315 - 67	FS2 - 1249 - 000	535 - 110		315 - 79
	535 - 37	FS2 - 1544 - 000	365 - 104		351 - 38
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	535 - 38		585 - 10		313 - 90
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	535 - 70	FS2 - 2784 - 000	810 - 96		314 - 89
FS1 - 1206 - 000	312 - 51	FS2 - 3004 - 000	312 - 56		315 - 80
	313 - 79		313 - 85	FS5 - 0394 - 000	312 - 60
	313A - 79		313A - 85		313 - 91
	314 - 78		314 - 84		313A - 91
	370 - 6		315 - 72		314 - 90
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FS1 - 1235 - 000	270 - 15	FS2 - 3486 - 000	252 - 11	FS5 - 0395 - 000	312 - 61
FS1 - 1250 - 000	316 - 53		260 - 12		313 - 92
FS1 - 1335 - 000	810 - 77	FS2 - 3490 - 000	290 - 13		313A - 92
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	313A - 80		313A - 113	FS5 - 0523 - 000	310 - 51
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	365 - 59	FS3 - 0166 - 000	310 - 49	FS5 - 0668 - 000	107 - 51
	370 - 6	FS3 - 0168 - 000	290 - 15	FS5 - 0669 - 000	316 - 62
	370 - 42	FS3 - 0451 - 000	104 - 11	FS5 - 0670 - 000	316 - 63
	375 - 8	FS3 - 0465 - 000	251 - 10	FS5 - 0671 - 000	316 - 64
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FS5 – 2600 – 000	370 – 53
FS5 – 2601 – 000	106 – 28
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FS5 – 2603 – 000	535 – 80
FS5 – 2604 – 000	535 – 81
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FS5 – 2608 – 000	310 – 22
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FS5 – 2620 – 000	820 – 24
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FS5 – 2622 – 000	312 – 65
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FS5 – 2628 – 000	530 – 69
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FS5 – 2632 – 000	536 – 30
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FS5 - 8846 - 000	101 - 8
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FS5 - 9215 - 000	103 - 36
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	106 - 58
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FS6 - 8488 - 000	100 - 66
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FS9 - 0016 - 000	306 - 3
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FY1 - 1131 - 000	108 - 61
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	580 - 3
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FY9 - 3015 - 000	020 - 3
FY9 - 3016 - 000	020 - 4
FY9 - 6005 - 000	020 - 5
FY9 - 6006 - 000	020 - 6
FY9 - 7006 - 020	001 - 5
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ME1 - 0009 - 000	110 - 7
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RH7 - 1104 - 030	910 - 1
RH7 - 1126 - 000	102 - 37
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RH7 - 8035 - 000	910 - 4
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RS1 - 1016 - 000	830 - 15
RS1 - 1054 - 000	830 - 5
RS5 - 9001 - 000	108 - 34
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VC9 - 5301 - 000	640 - 40E
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VR1 - 1141 - 394	770 - 14A
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VR5 - 3680 - 511	320 - 7B
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VS1 – 0279 – 008	B – J 59		B – J 115		B – J 175
VS1 – 0279 – 009	B – J1004		B – J 116		B – J 231
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VS1 – 0511 – 006	B – J 1		B – J 151		B – J 172
VS1 – 0842 – 002	B – J 30		B – J 152		B – J 190
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	B – J 137		B – J 169		B – J 171
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	B – J 141		B – J 182		B – J 307
	B – J 142		B – J 187		B – J 310
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VS1 - 0852 - 008	B - J3503
VS1 - 0852 - 009	B - J3601
VS1 - 0852 - 010	B - J 173
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VS1 - 0852 - 011	B - J1013
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VS1 - 0852 - 013	B - J1016
	B - J1023
VS1 - 0852 - 014	B - J1005
	B - J1007
	B - J1010
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VS1 - 0852 - 015	B - J1003
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VS1 - 0861 - 012	B - J1105
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VS1 - 0861 - 013	B - J2001
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	105 - 50	VS4 - 0001 - 009	B - J 3		932 - 6
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	105 - 49		B - J 18		180 - 4
VS1 - 5057 - 012	B - J 58		B - J 185	WS3 - 0409 - 000	B - J 183
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	107 - 84		B - J 47		B - J 128
	312 - 71		B - J 62		B - J 129
	620 - 26		B - J 286		B - J 131
VS1 - 5057 - 014	B - J 150	VS4 - 0002 - 004	B - J 17		B - J 135
	B - J 192		B - J 19		B - J 136
	B - J 284		B - J 20		B - J 170
	105 - 46		B - J 55		B - J 188
	108 - 17	VS4 - 0002 - 009	B - J 3		B - J 194
	108 - 28	VS4 - 0003 - 003	B - J 155		B - J 208
VS1 - 5057 - 015	B - J 193	VS4 - 0003 - 004	B - J 57		B - J 226
	B - J 270		B - J 135		B - J 303
	B - J 294		B - J 170		B - J 304
	105 - 47		B - J 194		B - J 315
	108 - 15	VS4 - 0004 - 002	B - J 129		B - J1001
	108 - 29	VS9 - 5007 - 016	B - J3503		B - J1004
VS1 - 5568 - 050	B - J2502	VS9 - 5007 - 018	B - J3601		B - J1006
VS1 - 5568 - 060	B - J4173	VS9 - 5007 - 020	B - J 173		B - J1011
VS1 - 5568 - 080	B - J4532		B - J 174		B - J1012
VS1 - 5730 - 002	B - J 32		B - J 229		B - J1153
VS1 - 5730 - 003	B - J 5		B - J 230		B - J3607
VS3 - 0044 - 003	B - J 224		B - J1014	WS3 - 0469 - 000	B - J 101
	B - J 225	VS9 - 5007 - 022	B - J1013		B - J 102
VS3 - 0044 - 005	B - J 704	VS9 - 5007 - 024	B - J 602		B - J 156
VS3 - 0047 - 003	B - J 312		B - J1002		B - J 158
VS3 - 0108 - 002	B - J 130		B - J1015		B - J 161
	B - J 304		B - J1018		B - J 168
VS3 - 0172 - 004	B - J5205		B - J3603		B - J 306
	B - J5310		B - J4152	WS3 - 0531 - 000	770 - 14C
VS3 - 0172 - 014	B - J5204	VS9 - 5007 - 026	B - J1016	WS3 - 0613 - 000	770 - 13C
	B - J5309		B - J1023	WS3 - 0885 - 000	B - J 16
VS3 - 0192 - 002	B - J 4	VS9 - 5007 - 028	B - J1005		B - J 57
VS3 - 0192 - 003	B - J 21		B - J1007		B - J 129
VS3 - 0192 - 004	B - J 61		B - J1010		B - J 130
	B - J 159		B - J1020		B - J 135
VS3 - 0192 - 006	110 - 9		B - J1021		B - J 170
	111 - 10		B - J1024		B - J 194
VS3 - 0308 - 032	B - J 191		B - J3605		B - J 304
	B - J 285	VS9 - 5007 - 030	B - J1003	WS3 - 0916 - 000	B - J 224
VS3 - 0309 - 032	B - J 191		B - J1017		B - J 225
	B - J 285		B - J1022		B - J 704
VS3 - 5009 - 006	B - J3506	VT2 - 0001 - 003	935 - 5	WS3 - 1141 - 000	B - J5204
VS3 - 5083 - 002	B - J 31		965 - 2		B - J5205
	B - J 34	VT2 - 0001 - 004	102 - 8		B - J5309
	B - J 35		500 - 8		B - J5310
VS3 - 5083 - 003	B - J 5	VT2 - 0001 - 018	253 - 18	WS3 - 1160 - 000	B - J 312
	B - J 11	VT2 - 0002 - 003	965 - 3	WS3 - 1271 - 000	B - J 191
	B - J 13	VT2 - 0002 - 004	102 - 35		B - J 285
VS3 - 5083 - 004	B - J 10		930 - 2	WS3 - 1272 - 000	B - J 191
	B - J 14	VT2 - 0006 - 003	980 - 4		B - J 285
	B - J 29		981 - 4	WS3 - 5016 - 000	B - J 155
	B - J 33	VT2 - 0012 - 005	990 - 8	WS3 - 5160 - 000	B - J 5
	B - J1008	VT2 - 0013 - 140	932 - 8		B - J 8
	B - J3501	WA1 - 0396 - 000	640 - 40F		B - J 10
	B - J4303		640 - 40G		B - J 11
VS3 - 5083 - 005	B - J 8		642 - 31F		B - J 13
	B - J 28		642 - 31G		B - J 22
VS3 - 5083 - 006	B - J 23	WA9 - 5228 - 000	981 - 5		B - J 23
	B - J 601	WC4 - 5023 - 000	290 - 20		B - J 24
	B - J1104		313 - 104		B - J 25
	B - J3604		313A - 104		B - J 26
VS3 - 5083 - 007	B - J 24		315 - 98		B - J 28
VS3 - 5083 - 008	B - J 25		316 - 83		B - J 29
	B - J 26	WC8 - 5051 - 000	102 - 9		B - J 31
	B - J2504		106 - 29		B - J 33
VS3 - 5083 - 009	B - J 22	WD3 - 0104 - 000	110 - 5		B - J 34
VS3 - 5083 - 011	B - J1009	WD3 - 0125 - 000	111 - 5		B - J 35
VS3 - 5124 - 020	B - J 173	WE8 - 5093 - 000	130 - 14A		B - J 601
	B - J 229	WE8 - 5101 - 000	107 - 68A		B - J1008
VS3 - 5125 - 020	B - J 174		130 - 25A		B - J1009
	B - J 230		950 - 7		B - J1104
VS4 - 0001 - 002	B - J 15	WG1 - 0562 - 000	770 - 13B		B - J2504
	B - J 18	WG1 - 5370 - 000	351 - 18C		B - J3501
VS4 - 0001 - 003	B - J 7		535 - 93D		B - J3604
	B - J 49	WG3 - 0103 - 000	320 - 7C		B - J4303
	B - J 62		351 - 45C	WS3 - 5216 - 000	B - J 285

PART NUMBER	FIGURE & KEY NO.
WS3 - 5217 - 000	B - J 191
	B - J 285
WS3 - 5249 - 000	B - J3506
WS3 - 5301 - 000	B - J 5
	B - J 32
WS3 - 5303 - 000	B - J 229
WS3 - 5304 - 000	B - J 173
WS3 - 5305 - 000	B - J 230
WS3 - 5306 - 000	B - J 174
WS4 - 0065 - 000	B - J 27
WS4 - 0073 - 000	B - J 1
	B - J 4
	B - J 21
	B - J 159
	110 - 10
	111 - 11
WS4 - 0074 - 000	B - J 61
WS4 - 0075 - 000	B - J 1
	B - J 2
	B - J 4
	B - J 27
	B - J 159
WS4 - 0076 - 000	B - J 61
WS4 - 0217 - 000	B - J 3
	B - J 6
	B - J 7
	B - J 17
	B - J 18
	B - J 19
	B - J 20
	B - J 47
	B - J 62
	B - J 286
	110 - 12
	111 - 13
WS4 - 0218 - 000	B - J 3
	B - J 15
	B - J 55
	B - J 185
WS4 - 0219 - 000	B - J 3
	B - J 17
	B - J 49
	B - J 62
WS4 - 0220 - 000	B - J 3
	B - J 7
	B - J 15
	B - J 18
	B - J 55
WS4 - 5160 - 000	B - J 14
WS9 - 0090 - 000	937 - 2
	938 - 1
	939 - 2
	941 - 2
WS9 - 0110 - 000	107 - 41
WS9 - 0258 - 100	107 - 126
WT1 - 0015 - 000	111 - 15
WT1 - 0017 - 000	110 - 19
	111 - 20
WT1 - 0029 - 000	110 - 18
	111 - 19
WT1 - 0143 - 000	110 - 14
WT1 - 0146 - 000	110 - 17
	111 - 18
WT1 - 0210 - 000	111 - 22
WT1 - 0247 - 000	110 - 20
	111 - 21
WT1 - 0580 - 000	110 - 8
	111 - 23
WT1 - 5174 - 000	111 - 14
WT1 - 5215 - 000	110 - 13
WT1 - 9501 - 000	110 - 15
	111 - 16
WT2 - 0088 - 000	770 - 11
WT2 - 0113 - 000	111 - 9
WT2 - 0136 - 000	106 - 30
	810 - 93
WT2 - 0171 - 000	100 - 81
	101 - 22
WT2 - 0204 - 000	314 - 95
	365 - 99
	810 - 94
WT2 - 0217 - 000	130 - 17
WT2 - 0241 - 000	312 - 34
	810 - 95
WT2 - 0262 - 000	103 - 33
WT2 - 0262 - 000	110 - 6
	111 - 6
	180 - 2
	252 - 20
	313 - 102
	313A - 102
	314 - 107
	315 - 23
	535 - 111
	810 - 107
WT2 - 0270 - 000	535 - 121
WT2 - 0276 - 000	351 - 13
WT2 - 0317 - 000	105 - 53
	306 - 4
	365 - 95
	370 - 28
	620 - 28
	622 - 32
	980 - 5
WT2 - 0365 - 000	365 - 61
WT2 - 0369 - 000	980 - 6
WT2 - 0387 - 000	530 - 58
WT2 - 0433 - 000	535 - 129
	810 - 105
WT2 - 0434 - 000	103 - 38
	105 - 22
	351 - 12
	420 - 17
	535 - 90
WT2 - 0482 - 000	250 - 6
WT2 - 0491 - 000	108 - 63
WT2 - 0494 - 000	102 - 44
	107 - 29
	107 - 64
	108 - 52
	430 - 11
WT2 - 0495 - 000	252 - 21
	312 - 92
	313 - 103
	313A - 103
	314 - 108
	315 - 107
	316 - 75
	365 - 14
	370 - 45
	810 - 98
WT2 - 0499 - 000	930 - 3
WT2 - 5011 - 000	102 - 39
	103 - 41
	107 - 66
	107 - 88
	107 - 113
	107 - 122
	108 - 55
	108 - 64
	312 - 93
	316 - 11
	500 - 31
	530 - 67
	535 - 100
	620 - 35
	950 - 2
WT2 - 5018 - 000	102 - 40
	108 - 40
	535 - 127
	620 - 17
	950 - 1
WT2 - 5026 - 000	102 - 38
	310 - 31
	320 - 2
	351 - 11
	375 - 4
	621 - 28
	622 - 33
WT2 - 5031 - 000	102 - 45
	102 - 49
	430 - 9
WT2 - 5035 - 000	106 - 31
	310 - 30
	351 - 9
	365 - 20
	370 - 59
	535 - 122
	910 - 5
WT2 - 5041 - 000	307 - 1
WT2 - 5041 - 000	316 - 55
	532 - 9
WT2 - 5056 - 000	103 - 43
	316 - 84
	351 - 3
	530 - 74
	535 - 99
	810 - 15
WT2 - 5062 - 000	102 - 46
	313 - 95
	313A - 95
	315 - 95
WT2 - 5064 - 000	107 - 20
WT2 - 5086 - 000	104 - 23
	430 - 10
WT2 - 5127 - 000	365 - 130
WT2 - 5134 - 000	365 - 129
WT2 - 5136 - 000	313A - 83
	314 - 42
	315 - 96
WT2 - 5165 - 000	910 - 11
WT2 - 5169 - 000	320 - 3
WT2 - 5178 - 000	316 - 10
	535 - 126
WT2 - 5212 - 000	312 - 91
	313 - 69
	313A - 112
	910 - 7
WT2 - 5218 - 000	101 - 32
	106 - 60
WT2 - 5219 - 000	255 - 9
WT2 - 5220 - 000	107 - 103
	108 - 62
WT2 - 5221 - 000	108 - 22
WT2 - 5222 - 000	310 - 39
	312 - 73
	313 - 81
	313A - 81
	314 - 92
	530 - 112
	532 - 11
	535 - 128
	810 - 49
WT2 - 5231 - 000	810 - 100
WT2 - 5232 - 000	375 - 22
	810 - 50
WT2 - 5300 - 000	107 - 6
	250 - 7
	252 - 22
	312 - 94
	313 - 105
	313A - 105
	314 - 58
	320 - 1
	375 - 17
	532 - 10
	810 - 99
WT2 - 5304 - 000	107 - 101
WT2 - 5308 - 000	107 - 102
WT2 - 5326 - 000	105 - 58
	316 - 54
WT2 - 9002 - 000	981 - 6
X31 - 6240 - 680	104 - 24
X62 - 5334 - 000	110 - 16
	111 - 17
X71 - 3186 - 000	102 - 10
X71 - 9310 - 000	290 - 23
XA1 - 6200 - 306	947 - 501
XA9 - 0014 - 000	550 - 24
XA9 - 0015 - 000	585 - 11
XA9 - 0033 - 000	640 - 46
	642 - 7
XA9 - 0040 - 000	105 - 16
XA9 - 0207 - 000	987 - 3
XA9 - 0235 - 000	910 - 16
	930 - 8
	950 - 5A
XA9 - 0238 - 000	910 - 12
XA9 - 0253 - 000	420 - 25
XA9 - 0265 - 000	110 - 21
XA9 - 0352 - 000	580 - 1
	590 - 10
XA9 - 0425 - 000	316 - 7
XA9 - 0546 - 020	536 - 45
XA9 - 0591 - 000	130 - 18

PART NUMBER	FIGURE & KEY NO.	PART NUMBER	FIGURE & KEY NO.	PART NUMBER	FIGURE & KEY NO.
XA9 - 0596 - 000	621 - 17	XB1 - 2300 - 409	313A - 512	XB1 - 2303 - 009	107 - 501
	622 - 16		314 - 512		430 - 514
XA9 - 0614 - 000	621 - 37		315 - 502	XB1 - 2304 - 007	550 - 508
	622 - 37		370 - 501	XB1 - 2400 - 309	365 - 519
XA9 - 0626 - 000	240 - 4		420 - 504	XB1 - 2400 - 406	310 - 511
	313 - 16		500 - 508	XB1 - 2400 - 409	261 - 501
	313A - 16		530 - 501		306 - 503
	314 - 34		535 - 509		307 - 503
XA9 - 0628 - 000	250 - 10		550 - 502		810 - 501
XA9 - 0629 - 000	100 - 51		580 - 501	XB1 - 2400 - 509	101 - 503
	101 - 29		590 - 502	XB1 - 2400 - 606	107 - 502
	102 - 19		640 - 506		160 - 501
	103 - 37		642 - 507		365 - 509
	104 - 25		710 - 507		430 - 513
	105 - 26		810 - 523		530 - 504
	106 - 48	XB1 - 2300 - 507	107 - 503		920 - 503
	107 - 2	XB1 - 2300 - 602	642 - 502		935 - 502
	108 - 2	XB1 - 2300 - 606	103 - 504		941 - 502
	109 - 7		107 - 509	XB1 - 2400 - 607	103 - 506
	253 - 1		107 - 511		107 - 513
	290 - 21		107 - 512		107 - 515
	312 - 95		430 - 504		535 - 503
	313 - 33		530 - 506		960 - 501
	313A - 33		930 - 501		965 - 501
	314 - 70		935 - 501		967 - 501
	315 - 97	XB1 - 2300 - 607	100 - 504	XB1 - 2400 - 609	101 - 501
	316 - 36		430 - 511		102 - 504
	370 - 58		939 - 502		103 - 502
	430 - 28		950 - 501		103 - 505
	535 - 50	XB1 - 2300 - 609	100 - 502		104 - 504
	910 - 8		102 - 503		105 - 503
	950 - 9		105 - 502		105 - 505
XA9 - 0630 - 000	105 - 59		107 - 510		106 - 503
	500 - 32		108 - 501		107 - 516
XA9 - 0633 - 000	100 - 52		108 - 509		108 - 503
	107 - 87		110 - 501		110 - 502
XA9 - 0642 - 000	107 - 108		111 - 501		111 - 502
	930 - 4		180 - 501		120 - 501
XA9 - 0679 - 000	375 - 3		180 - 502		251 - 503
	810 - 106		240 - 501		252 - 503
XA9 - 0685 - 000	316 - 3		252 - 502		255 - 502
XA9 - 0716 - 000	910 - 15		255 - 501		255 - 503
XA9 - 0719 - 000	810 - 102		270 - 502		260 - 501
XA9 - 0721 - 000	430 - 55		307 - 502		265 - 501
XA9 - 0722 - 000	103 - 20		310 - 502		270 - 504
XA9 - 0724 - 000	102 - 33		312 - 501		300 - 501
	316 - 57		313 - 502		305 - 501
	535 - 89		313A - 502		306 - 501
XA9 - 0748 - 000	430 - 47		314 - 501		307 - 501
XA9 - 0768 - 000	300 - 46		315 - 503		310 - 503
	305 - 42		316 - 501		312 - 502
XA9 - 0769 - 000	530 - 68		320 - 501		313 - 503
XA9 - 0782 - 000	100 - 8		351 - 501		313A - 503
	100 - 71		365 - 502		314 - 502
XA9 - 0783 - 000	100 - 78		370 - 502		315 - 504
XA9 - 0789 - 000	101 - 1		370 - 507		316 - 503
	240 - 9		375 - 502		320 - 502
XA9 - 0790 - 000	109 - 1		420 - 501		351 - 502
XA9 - 0791 - 000	107 - 92		430 - 510		365 - 503
XA9 - 0796 - 000	106 - 39		500 - 505		370 - 504
XA9 - 0809 - 000	270 - 18		530 - 502		375 - 504
XA9 - 0818 - 000	312 - 41		532 - 501		430 - 502
XA9 - 0875 - 000	106 - 55		535 - 501		500 - 501
	106 - 59		550 - 504		530 - 505
XA9 - 0884 - 000	106 - 11A		620 - 507		532 - 502
XB1 - 2200 - 409	550 - 501		621 - 501		536 - 502
XB1 - 2200 - 809	316 - 508		622 - 501		620 - 501
XB1 - 2231 - 009	290 - 501		810 - 502		710 - 505
	313 - 501		820 - 502		810 - 505
	313A - 501		835 - 501		830 - 501
	315 - 501	XB1 - 2300 - 809	107 - 517		835 - 504
XB1 - 2300 - 202	108 - 504		365 - 516	XB1 - 2400 - 806	365 - 517
XB1 - 2300 - 402	530 - 519		420 - 502	XB1 - 2400 - 809	102 - 505
	640 - 501		535 - 502		106 - 507
	642 - 501		810 - 503		108 - 508
XB1 - 2300 - 406	530 - 503	XB1 - 2301 - 002	585 - 501		530 - 516
	937 - 501	XB1 - 2301 - 009	430 - 505		810 - 506
	939 - 501		550 - 506	XB1 - 2401 - 007	107 - 514
	941 - 501	XB1 - 2301 - 409	835 - 502	XB1 - 2401 - 009	111 - 506
XB1 - 2300 - 409	108 - 506	XB1 - 2301 - 609	420 - 503		255 - 506
	270 - 501		835 - 503		375 - 503
	306 - 502	XB1 - 2303 - 007	550 - 507		430 - 503
	310 - 512		580 - 502		500 - 507
	312 - 506		590 - 501		530 - 515
	313 - 512	XB1 - 2303 - 009	105 - 501	XB1 - 2401 - 209	251 - 501

PART NUMBER	FIGURE & KEY NO.	PART NUMBER	FIGURE & KEY NO.	PART NUMBER	FIGURE & KEY NO.
XB1 - 2401 - 209	365 - 513	XD1 - 1106 - 212	710 - 506	XD2 - 1100 - 642	240 - 504
	370 - 505	XD1 - 1106 - 223	535 - 514		251 - 504
	430 - 512		835 - 508		252 - 501
	500 - 504	XD1 - 1106 - 225	530 - 507		253 - 502
XB1 - 2402 - 006	160 - 502	XD1 - 1106 - 235	810 - 517		255 - 504
XB1 - 2402 - 306	920 - 501	XD1 - 1106 - 723	835 - 509		260 - 503
XB1 - 2402 - 509	111 - 503	XD1 - 1108 - 213	255 - 505		261 - 503
XB1 - 2404 - 009	103 - 507	XD1 - 1108 - 222	270 - 505		265 - 504
XB1 - 2500 - 803	110 - 503		275 - 503		270 - 503
	111 - 504		810 - 518		275 - 501
XB1 - 2502 - 008	535 - 510	XD1 - 1108 - 223	536 - 503		290 ~ 502
XB1 - 3400 - 806	100 - 503	XD1 - 1108 - 225	240 - 503		300 - 503
XB2 - 2300 - 605	365 - 521	XD1 - 1108 - 233	270 - 506		305 - 503
	810 - 508		535 - 511		310 - 507
XB2 - 4300 - 605	810 - 521		810 - 513		312 - 505
XB2 - 4300 - 809	921 - 503	XD1 - 2100 - 305	990 - 501		313 - 506
XB2 - 4301 - 007	910 - 501	XD1 - 2100 - 307	550 - 510		313A - 506
XB2 - 4301 - 205	910 - 502		580 - 503		314 - 505
	990 - 502		590 - 503		315 - 507
XB2 - 4400 - 805	810 - 504	XD1 - 2100 - 405	500 - 509		316 - 505
	820 - 501	XD1 - 3100 - 809	109 - 501		351 - 503
	830 - 506	XD1 - 4100 - 502	110 - 504		365 - 506
XB2 - 8300 - 805	980 - 501		111 - 505		375 - 505
XB2 - 8301 - 005	835 - 512	XD2 - 1100 - 242	310 - 504		430 - 501
XB2 - 8401 - 009	107 - 508		312 - 503		530 - 510
XB3 - 2300 - 609	365 - 518		313 - 504		535 - 506
XB4 - 6300 - 609	102 - 501		313A - 504		536 - 506
XB4 - 6300 - 809	300 - 502		314 - 503		620 - 505
	305 - 502		315 - 505		621 - 502
	921 - 501		370 - 503		622 - 504
XB4 - 6401 - 006	920 - 502	XD2 - 1100 - 322	106 - 505		810 - 512
	921 - 502		310 - 505		820 - 504
XB4 - 7300 - 505	585 - 502		312 - 512		830 - 504
XB4 - 7300 - 609	100 - 507		316 - 510		835 - 511
	311 - 501		532 - 503	XD2 - 1100 - 802	535 - 512
	500 - 506		536 - 504	XD2 - 1200 - 802	430 - 508
	550 - 509		550 - 505	XD2 - 2100 - 402	620 - 506
	971 - 501		620 - 503	XD2 - 2100 - 502	530 - 517
XB4 - 7300 - 809	840 - 502		640 - 503	XD2 - 2100 - 602	107 - 505
	642 - 503		642 - 504		312 - 507
	835 - 506		710 - 504		313 - 508
XB4 - 7400 - 809	100 - 501		830 - 502		313A - 508
	100 - 506	XD2 - 1100 - 402	101 - 502		314 - 507
	100 - 508		102 - 502		315 - 509
	107 - 506		365 - 515		316 - 507
	108 - 507	XD2 - 1100 - 502	103 - 503		365 - 507
	316 - 509		105 - 506		620 - 508
	365 - 510		106 - 501	XD2 - 2100 - 802	300 - 504
	500 - 502		107 - 507		305 - 504
	620 - 502		108 - 505		310 - 509
XB4 - 7401 - 006	160 - 503		120 - 502		313 - 509
XB4 - 7401 - 007	311 - 502		250 - 502		313A - 509
XB6 - 2300 - 608	310 - 501		260 - 502		314 - 508
XB6 - 2400 - 408	530 - 514		265 - 503		315 - 508
	810 - 509		300 - 505		316 - 511
XB6 - 2400 - 508	365 - 512		305 - 505		351 - 504
	535 - 504		310 - 506		535 - 507
XB6 - 2400 - 608	265 - 502		312 - 504		640 - 505
	710 - 501		313 - 505		642 - 506
XB6 - 2400 - 809	835 - 505		313A - 505	XD2 - 2101 - 002	250 - 501
XB6 - 2401 - 008	108 - 506		314 - 504	XD2 - 2300 - 402	535 - 513
	430 - 509		315 - 506	XD2 - 3100 - 142	810 - 514
XB6 - 2500 - 508	530 - 518		316 - 504	XD2 - 3100 - 252	106 - 502
XB6 - 2500 - 808	530 - 511		365 - 505	XD3 - 1160 - 102	310 - 510
XB6 - 7300 - 405	365 - 511		370 - 506	XD3 - 1160 - 142	310 - 508
	810 - 507		375 - 501	XD3 - 1200 - 082	312 - 511
XB6 - 7300 - 407	100 - 505		500 - 503		313 - 507
XB6 - 7300 - 409	365 - 501		530 - 508		313A - 507
XB6 - 7300 - 609	318 - 502		535 - 505		314 - 506
	810 - 519		536 - 505		710 - 508
	835 - 507		620 - 504	XD3 - 1200 - 102	312 - 508
XB6 - 7300 - 809	316 - 508		621 - 503		313 - 510
XB6 - 7400 - 605	104 - 505		622 - 503		313A - 510
	105 - 504		640 - 504		314 - 509
XB6 - 7400 - 609	104 - 501		642 - 505		315 - 512
	107 - 504		710 - 503		830 - 507
	365 - 514		810 - 511	XD3 - 1200 - 122	312 - 509
	810 - 520		830 - 503		313 - 511
XB6 - 7400 - 809	108 - 504		835 - 510		313A - 511
XB7 - 2100 - 309	430 - 506	XD2 - 1100 - 642	103 - 501		314 - 510
XB7 - 2100 - 409	430 - 507		104 - 502		315 - 510
XB7 - 2100 - 509	810 - 510		104 - 503		621 - 504
XD1 - 1101 - 539	810 - 524		104 - 506		622 - 502
XD1 - 1104 - 122	830 - 505		108 - 502	XD3 - 1200 - 142	290 - 503
XD1 - 1104 - 135	536 - 501		120 - 503		830 - 508

PART NUMBER	FIGURE & KEY NO.
XD3 – 1300 – 102	312 – 510
	313 – 513
	313A – 513
	314 – 511
	365 – 508
	370 – 508
XD3 – 1300 – 122	810 – 515
XD3 – 1300 – 252	315 – 511
XD3 – 1300 – 322	530 – 509
	535 – 508
XD3 – 2160 – 062	536 – 507
XD3 – 2160 – 082	550 – 503
XD3 – 2200 – 102	253 – 504
	351 – 505
	365 – 504
	530 – 513
XD3 – 2200 – 122	261 – 504
	365 – 520
	530 – 512
	710 – 502
	810 – 522
	820 – 503
XD3 – 2200 – 142	253 – 501
	260 – 504
	365 – 522
	535 – 515
XD3 – 2200 – 162	240 – 505
	252 – 504
	253 – 503
	260 – 505
	261 – 502
	265 – 505
	351 – 506
	536 – 508
	810 – 516
XD3 – 2200 – 182	240 – 502
	251 – 502
	275 – 502
XD3 – 2300 – 182	260 – 506
XD3 – 2300 – 202	250 – 503
XD9 – 0103 – 000	120 – 18
	120 – 19
	310 – 33
	312 – 74
	313 – 62
	313A – 110
	314 – 10
	315 – 22
	535 – 51
	536 – 40
	820 – 15
	835 – 33
XD9 – 0104 – 000	535 – 52
	621 – 34
	622 – 29
XD9 – 0108 – 000	251 – 19
	252 – 16
	290 – 24
	310 – 32
	312 – 44
	313 – 18
	313A – 18
	314 – 40
	315 – 19
	316 – 85
	535 – 63
	621 – 35
	622 – 30
	820 – 10
XD9 – 0111 – 000	315 – 18
XD9 – 0150 – 000	250 – 1
XF9 – 0094 – 000	312 – 66
	313 – 108
	313A – 108
	314 – 103
XF9 – 0120 – 000	314 – 20
XF9 – 0348 – 000	365 – 98
XF9 – 0358 – 000	530 – 79
XF9 – 0381 – 000	430 – 29
XF9 – 0393 – 000	311 – 14
XF9 – 0398 – 000	365 – 77
XF9 – 0400 – 000	315 – 99
XF9 – 0425 – 000	365 – 78
XF9 – 0430 – 000	530 – 76
	710 – 36
XF9 – 0460 – 000	108 – 44
XF9 – 0461 – 000	108 – 45
XF9 – 0462 – 000	251 – 6
XF9 – 0463 – 000	260 – 19
XF9 – 0466 – 000	315 – 100
XF9 – 0492 – 000	365 – 15
XF9 – 0494 – 000	316 – 43
XF9 – 0495 – 000	316 – 86
XF9 – 0549 – 000	620 – 29
XF9 – 0553 – 000	108 – 60
XF9 – 0585 – 000	313A – 70
XG9 – 0013 – 000	251 – 21
XG9 – 0094 – 000	251 – 20
	261 – 13
	265 – 2
XG9 – 0111 – 000	621 – 6A
	621 – 23A
	622 – 18A
	622 – 19A
XG9 – 0172 – 000	313A – 69
	315 – 77
XG9 – 0208 – 000	252 – 19
	260 – 20
XG9 – 0211 – 000	260 – 8
	261 – 5
	313A – 62
	314 – 104
	315 – 101
	316 – 87
	351 – 44
	530 – 78
XG9 – 0219 – 000	640 – 23
	642 – 23
XG9 – 0223 – 000	530 – 57
XG9 – 0249 – 000	240 – 10
	430 – 30
XG9 – 0250 – 000	252 – 18
	253 – 7
	260 – 21
	314 – 81
	530 – 58
	820 – 20
XG9 – 0264 – 000	240 – 13
	251 – 9
	290 – 3
	365 – 58
XG9 – 0301 – 000	106 – 6
XG9 – 0321 – 000	710 – 35
XG9 – 0344 – 000	621 – 23B
	622 – 19B
XG9 – 0350 – 000	536 – 43
XH9 – 0006 – 000	103 – 24
XZ9 – 0101 – 000	530 – 35
XZ9 – 0124 – 000	100 – 7
XZ9 – 0240 – 000	101 – 9
	102 – 20
	102 – 43
	316 – 70
XZ9 – 0251 – 000	535 – 53
XZ9 – 0353 – 000	100 – 76
XZ9 – 0367 – 000	109 – 2
XZ9 – 0373 – 000	109 – 3
XZ9 – 0390 – 000	101 – 16
XZ9 – 0391 – 020	104 – 7
XZ9 – 0406 – 000	100 – 61
Y81 – 0162 – 000	550 – 5

D2 NUMERICAL INDEX (CLC PS BOARD UNIT-A1)
部品索引表（CLC　PS ボード　ユニット-A1）

PART NUMBER	FIGURE & KEY NO.
FB4 – 2725 – 000	M10 – 1
FB4 – 2728 – 000	M10 – 2
FB4 – 2729 – 000	M10 – 3
FB4 – 2735 – 000	M10 – 4A
FB4 – 2749 – 000	M10 – 1A
FE1 – 4528 – 000	M10 – 24
FE1 – 4529 – 000	M10 – 24
FE1 – 4534 – 000	M10 – 26
FE1 – 4542 – 000	M10 – 28
FE1 – 4544 – 000	M10 – 30
FE1 – 4545 – 000	M10 – 29
FE1 – 4616 – 000	M10 – 25
FE1 – 4699 – 000	M10 – 32
FE1 – 4700 – 000	M10 – 33
FE1 – 4701 – 000	M10 – 33
FE1 – 4703 – 000	M10 – 32
FE1 – 4704 – 000	M10 – 33
FE1 – 4705 – 000	M10 – 33
FE1 – 4707 – 000	M10 – 33
FE1 – 4708 – 000	M10 – 33
FE1 – 4710 – 000	M10 – 33
FE1 – 4711 – 000	M10 – 33
FE1 – 4713 – 000	M10 – 33
FE1 – 4714 – 000	M10 – 33
FE1 – 4716 – 000	M10 – 32
FE1 – 4717 – 000	M10 – 33
FE1 – 4718 – 000	M10 – 33
FE1 – 4722 – 000	M10 – 22
FE1 – 4723 – 000	M10 – 23
FE1 – 4725 – 000	M10 – 27
FE1 – 4790 – 000	M10 – 31
FF5 – 6908 – 000	M10 – 1
FG6 – 0411 – 000	M10 – 4
FG6 – 0660 – 000	M10 – 5
FG6 – 0661 – 000	M10 – 6
FG6 – 0663 – 000	M10 – 7
FG6 – 0664 – 000	M10 – 8
FG6 – 0665 – 000	M10 – 9
FG6 – 0666 – 000	M10 – 10
FG6 – 0667 – 000	M10 – 11
FG6 – 0668 – 000	M10 – 12
FG6 – 0669 – 000	M10 – 13
FH2 – 6449 – 000	M10 – 13
FH2 – 6450 – 000	M10 – 14
FH3 – 2505 – 000	M10 – 15
FH3 – 2506 – 000	M10 – 15
FH6 – 1459 – 000	M10 – 16
FS6 – 8491 – 000	M10 – 17
FS6 – 8495 – 000	M10 – 18
FS6 – 8496 – 000	M10 – 18
PCB	M B – J 01
	M B – J 27
	M B – J 28
	M B – J 30
	M B – J 51
	M B – J 52
	M B – J102
	M B – J103
	M B – J104
	M B – J106
VS1 – 0511 – 006	M B – J 02
VS1 – 0610 – 010	M B – J 30
VS1 – 0610 – 026	M B – J 27
	M B – J 28
VS1 – 0610 – 050	M B – J 22
	M B – J 42
VS1 – 0842 – 002	M B – J106
	M B – J107
VS1 – 5057 – 002	M B – J107
VS1 – 5729 – 003	M B – J 04
VS1 – 5729 – 004	M B – J 05
VS1 – 6287 – 006	M B – J 51
	M B – J 52
VS3 – 0192 – 006	M B – J 03
VS3 – 5083 – 003	M B – J 01
	M B – J 04
VS3 – 5083 – 004	M B – J 05
	M B – J104
VS3 – 5083 – 006	M B – J103
VS3 – 5083 – 007	M B – J102
WS1 – 5665 – 000	M B – J 31
WS3 – 0943 – 000	M B – J 31
WS3 – 1212 – 000	M B – J 02
WS3 – 5160 – 000	M B – J 01
	M B – J 04
WS3 – 5160 – 000	M B – J 05
	M B – J102
	M B – J103
	M B – J104
WS3 – 5183 – 000	M B – J 41
WS3 – 5184 – 000	M B – J 41
WS3 – 5301 – 000	M B – J 04
	M B – J 05
WS3 – 5531 – 000	M B – J 51
	M B – J 52
WS3 – 5664 – 000	M B – J 21
WS4 – 0073 – 000	M B – J 03
WT2 – 0499 – 000	M10 – 19
	M10 – 20
WT2 – 5061 – 000	M10 – 21
XB1 – 2300 – 607	M10 – 501
	M10 – 502
XB1 – 2302 – 507	M10 – 503
XB1 – 2400 – 607	M10 – 504
XB1 – 2404 – 509	M10 – 505
XB7 – 2100 – 409	M10 – 506
XZ1 – 1401 – 805	M10 – 507

〒302-8501
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映像事務機TS推進部
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Canon

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COLOR LASER COPIER 700/800

SERVICE MANUAL

REVISION 2 NOV. 1996

Canon
FY8-13D5-020

CANON CLC 700/800 REV.2 NOV. 1996 PRINTED IN JAPAN

I. FEATURES

1. New engine and new image processing systems promise high-quality images and faithful reproduction of colors.

The use of a large-diameter drum and a fixed development method, new image processing technology, new transfer method, and a microscopic laser beam bring about stable image quality and accurate reproduction of colors.

2. Ease of operation on a large-sized liquid crystal display panel.

A full body of know-how on how to create full-color copies is ready at hand on a large-size liquid crystal display panel so that the operator can expect to obtain high-quality images regardless of his/her knowledge or skill in color reproduction.

3. Automatic duplexing mechanism.

The CLC800 is equipped with an automatic duplexing mechanism. (Thick paper may be used for two-sided copies by feeding it through the multifeeder; in the case of the CLC700, two-sided copies may be made in the manual mode.)

4. A variety of creative functions.

The copier provides a variety of features for those with a creative mind: its color creation mechanisms include fine-adjustment of hues, chroma, and density, adjustment of color balance; in addition, the copier offers a number of one-touch adjustment controls; its image creation mechanisms include texture processing, image repeating, and mirror imaging; its image processing/editing mechanisms include highlight processing, character processing, and coloring.

II. SPECIFICATIONS

A. Type

Body	Console
Copyboard	Fixed
Light source	Halogen lamp (235 W)
Lens	Lens array
Image reading	Photocells (BGR 3-line CCD); with CCD fixed, by mirror scanning
Photosensitive medium	OPC drum

B. System

Reproduction	Laser beam indirect electrostatic reproduction
Charging	Corona
Exposure	Laser beam
Contrast adjustment	Automatic
Development	Projection and brush (M, C, Y, Bk)
Toner supply	Manual (345 g/bottle)
Pick-up	2 special front loading cassettes and multifeeder (CLC700); 3 special front loading cassettes and multifeeder (CLC800)
Retention	Static retention (gripperless)
Transfer	Brush (transfer sheet)
Separation	Claw and push-up spacer (separation corona assembly as auxiliary)
Cleaning	Blade
Fixing	Heat roller (U, 600 W; L; 600 W)

C. Performance

Type of original		Sheet, book, 3-D object (2 kg/4.4 lb max.)	
Maximum original size		A3 (297 x 420 mm)/Ledger (11" x 17")	
Reproduction ratio		Default: DIRECT (±0.5%), others (±1.0%; see Table 1-1) Zoom: 25% to 400% (±1.0%)	
Wait time (20°C/68°F)		8 min (approx.) 3 min (approx.; in pre-heat mode)	
First copy time (A4/LTR)		Without original detection scanning	28 sec (approx.; full color)
Continuous copying		100 copies (max.)	
Copying speed		See Table 1-2.	
Copy size	Cassette	Max.: A3 (297 x 420 mm)/Ledger (11" x 17") Min.: B5R (182 x 257 mm)/LetterR (8.5" x 11")	
	Multifeeder	Max.: 297 x 432 mm (11.7" x 17") Min.: 182 x 257 mm (7.16" x 10.11")	
Type of copy paper	Cassette	Plain paper (80 to 105 g/m^2), transparency (special)	
	Multifeeder	Postcard (special), thick paper (106 to 163 g/m^2), label sheet (special)	
	Two-sided copy (CLC800 only)	Plain paper (90 to 105 g/m^2)	
Cassette		Clawless, center reference; 55 mm/2.17 in deep (about 500 sheets of 80 g/m^2 paper)	
Delivery tray		100 sheets (approx. of 80 g/m^2 paper)	
Copy margin		One-sided	Two sided
		Leading edge: 8.0 ± 1.5 mm Trailing edge: 2.5 ± 1.5 mm Left/right: 2.0 ± 1.0 mm	8.0 ± 2.0 mm 2.5 ± 1.5 mm 2.0 ± 1.5 mm (4.5 ±1.5 mm for one side of a two-sided copy or in manual mode)
Non-image width		Leading edge: 8.0 ± 1.5 mm Trailing edge: 4.5 mm Left/right: 2.0 ± 1.0 mm	8.0 ± 2.0 mm 4.5 mm 2.0 ± 1.5 mm
Main scanning direction		400 DPI (dots per inch; 15.7 dots/mm)	
Sub scanning direction		400 LPI (lines/in; 15.7 lines/mm)	
Auto clear		Provided (2 min standard; may be changed or disabled in user mode)	

Auto color selection	Provided (distinguishes between color and black-and-white originals to select 4-color/black-mono copying)
AE	Provided
Auto paper selection	Provided
Auto zoom	Provided
One-touch adjustment	Provided
Color adjustment	Provided (color balance, chroma adjustment, hue adjustment)
Auto shutoff	Provided
Marker designation	Provided (requires IP-ED Board)
Original mode	Provided (text/photo, text, photo, map)
Frame erasing	Provided
Auto gradation correction	Provided
Option	Film Projector, CCV, IPU-2, IPU10/10S*, IPU II, PS-IPU, PS-IPU III, Film Scanner-3, RDF, Sorter

* Connection requires replacement of the IPU10/10S's ROM, making it a CLC700/800-specific IPU10/10S.

D. Others

<table>
<tr><td colspan="2">Operating environment</td><td colspan="2">Temperature: See Figure 5-1.
Humidity: See Figure 5-1.
Atmospheric pressure: 0.8 to 1 atm; 810.6 hPa to 1013.3 hPa)</td></tr>
<tr><td colspan="2">Power supply (voltage ±10%)</td><td colspan="2"><table>
<tr><td>Model</td><td colspan="2">CLC700</td><td colspan="2">CLC800</td></tr>
<tr><td>TYPE</td><td>TYPE1</td><td>TYPE2</td><td>TYPE1</td><td>TYPE2</td></tr>
<tr><td>115V (TWN)</td><td>NCN xxxx</td><td>NKN xxxx</td><td>NCT xxxx</td><td>NKT xxxx</td></tr>
<tr><td>115V (USA)</td><td>NCL xxxx</td><td>NKL xxxx</td><td>NCS xxxx</td><td>NKS xxxx</td></tr>
<tr><td>230V (KOR)</td><td>———</td><td>PKR xxxx</td><td>———</td><td>———</td></tr>
<tr><td>230V (Others)</td><td>PCN xxxx</td><td>PKN xxxx</td><td>PCS xxxx</td><td>PKS xxxx</td></tr>
<tr><td>230V (UK)</td><td>QCQ xxxx</td><td>QKQ xxxx</td><td>QCS xxxx</td><td>QKS xxxx</td></tr>
<tr><td>230V (CA)</td><td>RCQ xxxx</td><td>RKQ xxxx</td><td>RCS xxxx</td><td>RKS xxxx</td></tr>
<tr><td>230V (FRN)</td><td>SCR xxxx</td><td>SKR xxxx</td><td>SCS xxxx</td><td>SKS xxxx</td></tr>
<tr><td>230V (GER)</td><td>TCR xxxx</td><td>TKR xxxx</td><td>TCS xxxx</td><td>TKS xxxx</td></tr>
<tr><td>230V (AMS)</td><td>UCR xxxx</td><td>UKR xxxx</td><td>UCS xxxx</td><td>UKS xxxx</td></tr>
</table>
TYPE1 and TYPE2 models may be identified by machine serial numbers.</td></tr>
<tr><td colspan="2">Power consumption</td><td colspan="2">Maximum: 1.5 kW or less
Copying: 0.75 kW/h or less (A4, full-color, continuous; reference only)
Standby: 0.29 kW/h (pre-heat off; reference only)</td></tr>
<tr><td colspan="2">Noise</td><td>71 dB (copying)
50 dB (standby)
Measured at a point 1 m from the machine.</td><td>Sound power level as measured by the ISO method</td></tr>
<tr><td colspan="2">Ozone</td><td colspan="2">0.02 ppm or less (average over 8 hr)</td></tr>
<tr><td rowspan="2">Consumables</td><td>Paper</td><td colspan="2">Keep paper wrapped to protect against humidity.</td></tr>
<tr><td>Toner</td><td colspan="2">Protect from sunshine; keep at 40°C/105°F or less.</td></tr>
<tr><td colspan="2">Dimensions</td><td colspan="2">Width: 755 mm/29.7 in.
Depth: 770 mm/30.3 in.
Height: 1000 mm/39.4 in.</td></tr>
<tr><td colspan="2">Weight</td><td colspan="2">253 kg (CLC700 only)
281 kg (CLC800 only)
3.7 kg (copyboard cover)
4.9 kg (editor)</td></tr>
</table>

Country	Reduction		Enlargement	
Japan, Australia, others (6R5E)		0.250	B4 → A3 B5R → A4R B5 → A4	1.153
	A3 → A4R B4 → B5R	0.707		
	B4 → A4R	0.815	A4R → B4, A5 → B5	1.223
	A3 → B4 A4R → B5R	0.865	A4R → A3 B5R → B4	1.414
		0.500	A5 → A3	2.000
	A3 → B5	0.611		4.000
North America (5R4E)		0.250	LGL → 11" x 17"	1.214
		0.500	LTRR → 11" x 17"	1.294
	11" x 17" → LTRR	0.647	MINIT → LTRR	2.000
	11" x 17" → LGL	0.733	MINIR → 11" x 17"	4.000
	LGL → LTRR	0.786		
Europe (3R3E)		0.250	A4R → A3	1.414
	A3 → A4R	0.707	A5 → A3	2.000
		0.500		4.000

Table 1-201 Default Reproduction Ratios

Copy size	4-color (YMCBk)	Mono-color (YMCBk)
A3	3.53	14.11
B4	3.53	14.11
A4-R	3.53	14.11
B5-R	3.53	14.11
A4	7.06	28.22
B5	7.06	28.22
11" x 17"	3.53	14.11
LGL	3.53	14.11
LTR-R	3.53	14.11
LTR	7.06	28.22

Table 1-202 Copying Speed (copies/min)

Specifications subject to change without notice.

NOTICE:
This copier is equipped with a Counterfeit Protection System.

III. ⚠LASER AND SAFETY MEASURES

A. DHHS

The CLC700/800 has been approved as Class 1 equipment under the Radiation Performance Standards of the Department of Health and Human Services (DHHS), established in the U.S.A. in 1968.

The approval represents that the product has shown to be free of harmful laser beams; the optical system of the product is designed such that the laser beams are confined in a protective housing and cannot escape the product while in use.

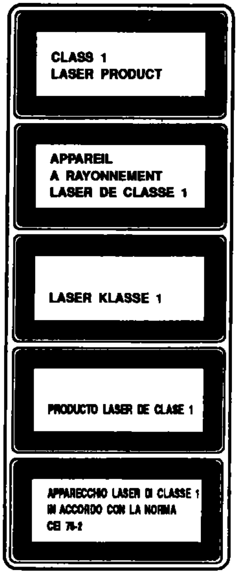

CLASS 1
LASER PRODUCT
APPAREIL
A RAYONNEMENT
LASER DE CLASSE 1
LASER KLASSE 1
PRODUCTO LASER DE CLASE 1
APPARECCHIO LASER DI CLASSE 1
IN ACCORDO CON LA NORMA
CEI 76-2

Figure 1-1

B. CDRH

On August 2, 1976, the Center for Devices and Radiological Health (CDRH) of the Food and Drug Administration of the U.S.A. put an act in force to deal with laser devices.

Under the act, laser devices manufactured on and after August 1, 1976, may not be marketed in the United States without approval.

Figure 1-2 shows the label which serves as proof of approval under the act; the label is required to be attached to all laser devices marketed in the U.S.A.

CANON
30-2, SHIMOMARUKO, 3-CHOME, OHTAKU, TOKYO,
146, JAPAN.
MANUFACTURED :
THIS PRODUCT CONFORMS WITH CDRH RADIATION
PERFORMANCE STANDARD 21CFR CHAPTER 1
SUBCHAPTER J.

Figure 1-2

Note:
The description may vary from product to product.

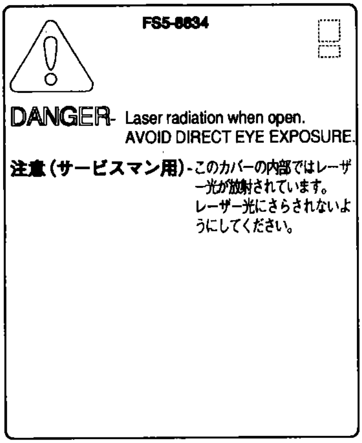
C. Points to Note When Handling the Laser Unit

When servicing the optical unit of the product, take adequate care not to interrupt the laser path with a tool having a high reflectance.

As a rule, remove the watch, rings, or the like before work; such items tend to reflect the beam and damage the eyes.

Remain alert when servicing inside the covers on which the label is attached.

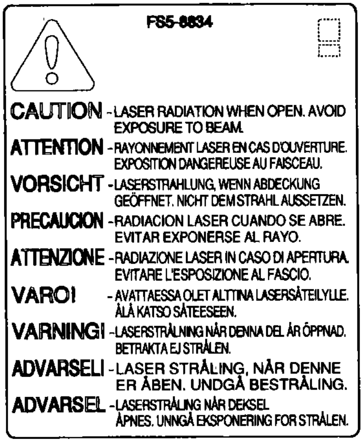
The machine is equipped with a shutter which blocks out the laser beam when the front left door is opened; therefore, when images are checked with the front left door open, the shutter needs to be held open using a door switch actuator. Keep these in mind when such work is necessary.



FS5-8834

DANGER- Laser radiation when open.
AVOID DIRECT EYE EXPOSURE.

注意（サービスマン用）-このカバーの内部ではレーザー光が放射されています。
レーザー光にさらされないようにしてください。



FS5-8834

CAUTION -LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

ATTENTION -RAYONNEMENT LASER EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.

VORSICHT -LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

PRECAUCION -RADIACION LASER CUANDO SE ABRE. EVITAR EXPONERSE AL RAYO.

ATTENZIONE -RADIAZIONE LASER IN CASO DI APERTURA. EVITARE L'ESPOSIZIONE AL FASCIO.

VARO! -AVATTAESSA OLET ALTTINA LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

VARNING! -LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.

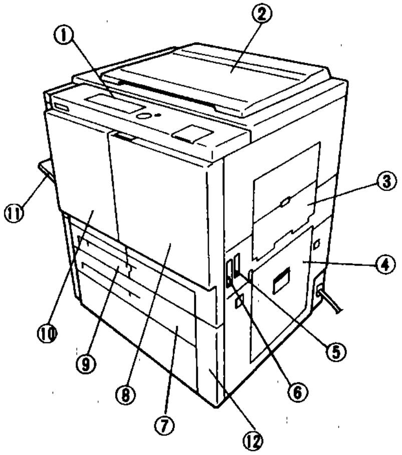
ADVARSEL! -LASER STRÅLING, NÅR DENNE ER ÅBEN. UNDGÅ BESTRÅLING.

ADVARSEL -LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.

Figure 1-3

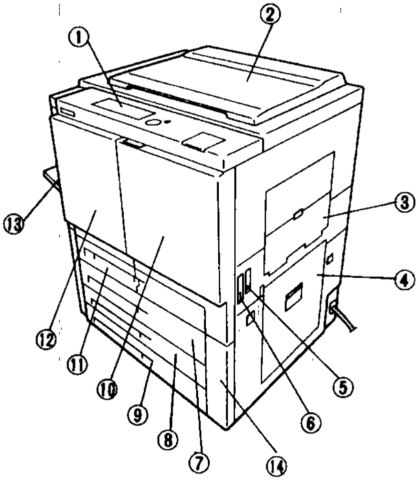
IV. NAMES OF PARTS

A. External View



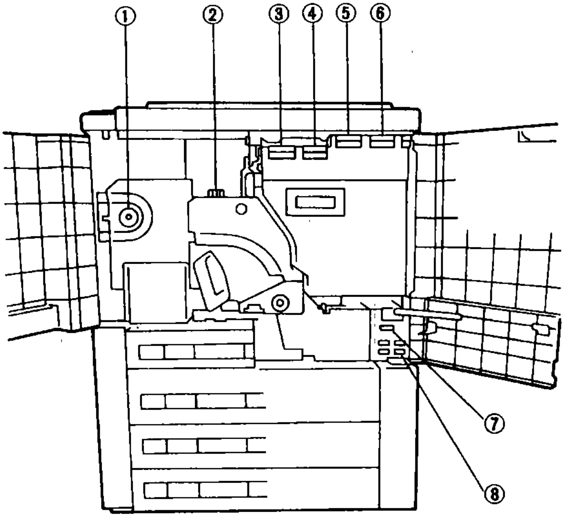
①	Control panel
②	Copyboard cover
③	Multifeeder
④	Pick-up door
⑤	Control key
⑥	Power switch
⑦	Cassette 2
⑧	Front right door
⑨	Cassette 1
⑩	Front left door
⑪	Copy tray
⑫	Servicing documents compartment

Figure 1-4 (CLC700)



①	Control panel
②	Editor
③	Multifeeder
④	Pick-up door
⑤	Control key
⑥	Power switch
⑦	Duplexing unit
⑧	Cassette 3
⑨	Cassette 4
⑩	Front right door
⑪	Cassette 1
⑫	Front left door
⑬	Copy tray
⑭	Servicing documents compartment

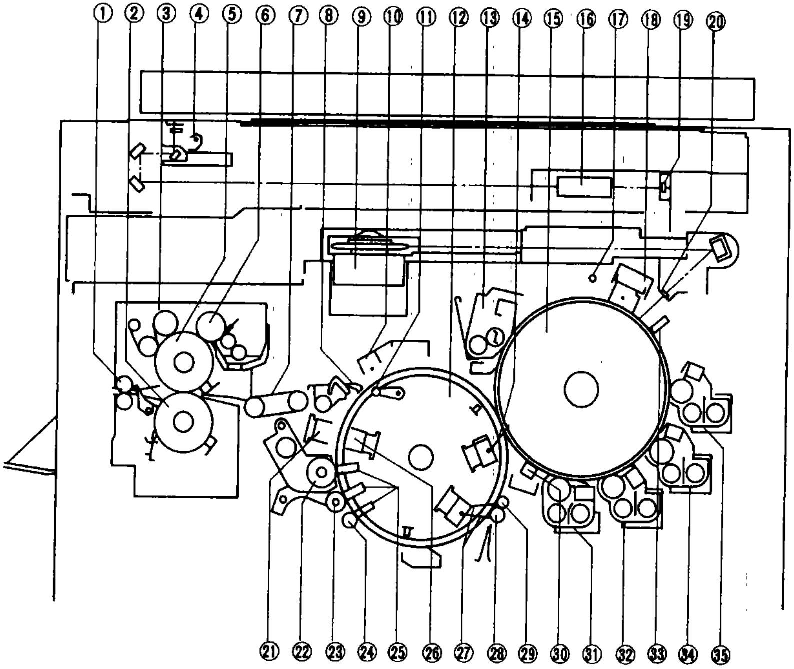
Figure 1-5 (CLC800)



①	Fixing assembly knob
②	Front left door switch
③	Bk toner supply mouth
④	M toner supply mouth
⑤	C toner supply mouth
⑥	Y toner supply mouth
⑦	Front right door switch
⑧	Counter

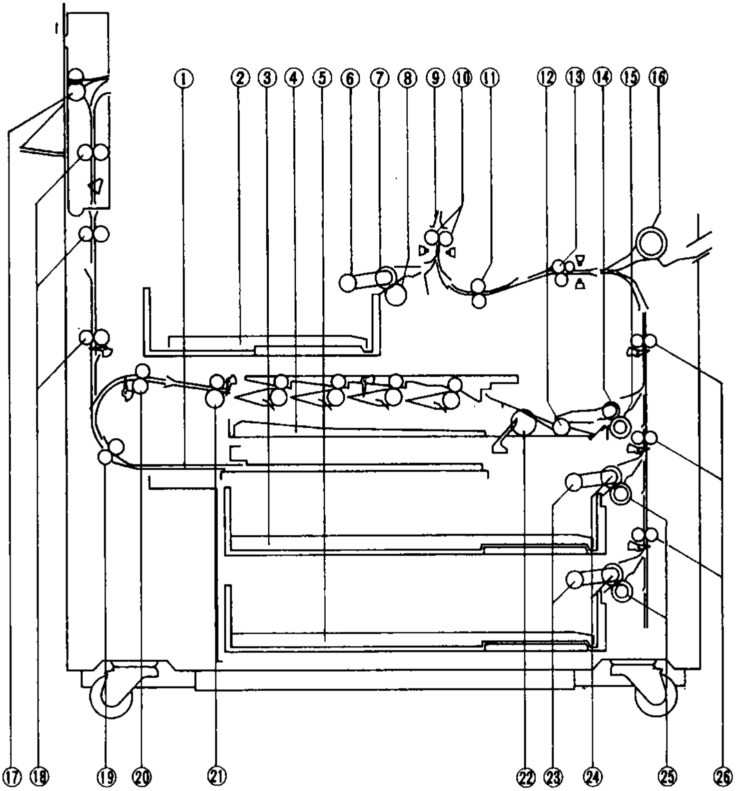
Figure 1-6 (CLC800)

B. Cross Section



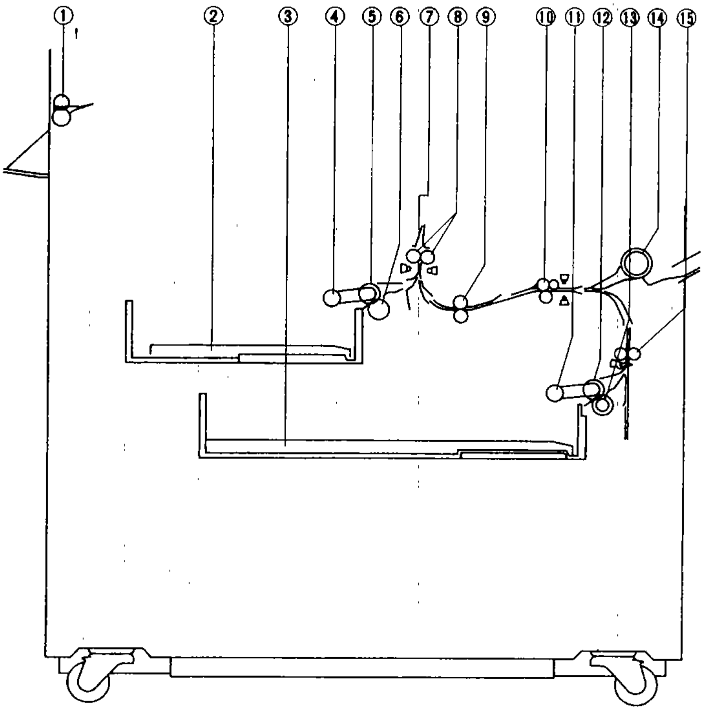
① Inside delivery roller
② Lower fixing roller
③ Cleaning belt
④ Scanning lamp
⑤ Upper fixing roller
⑥ Oil application roller
⑦ Feed belt
⑧ Separation claw
⑨ Laser scanner
⑩ Separation corona assembly
⑪ Separation push-up spacer
⑫ Transfer drum
⑬ Photosensitive drum cleaner
⑭ Transfer brush
⑮ Photosensitive drum
⑯ Lens
⑰ Pre-exposure lamp
⑱ Primary corona assembly
⑲ CCD
⑳ Dust proof glass
㉑ External static eliminator
㉒ Transfer drum cleaner
㉓ Transfer oil removing roller
㉔ Transfer polishing roller
㉕ Transfer push-on brush
㉖ Internal static eliminator
㉗ Retention brush
㉘ Retention roller
㉙ Retention smoothing roller
㉚ Black toner density sensor
㉛ Black developing assembly
㉜ Magenta developing assembly
㉝ Potential sensor
㉞ Cyan developing assembly
㉟ Yellow developing assembly

Figure 1-7 (CLC700/CLC800)



① Duplexing unit reversing assembly
② 1st cassette holder
③ 2nd cassette holder
④ Duplexing stacking assembly
⑤ 4th cassette holder
⑥ Cassette 1 pick-up roller
⑦ Cassette 1 feeding roller
⑧ Cassette 1 separation roller
⑨ Retention guide
⑩ Registration roller
⑪ Pre-registration roller 1
⑫ Duplexing pick-up roller
⑬ Pre-registration roller 2
⑭ Duplexing feeding roller
⑮ Duplexing separation roller
⑯ Multifeeder pick-up roller
⑰ External delivery roller
⑱ Delivery vertical path roller
⑲ Duplexing reversing assembly inlet roller
⑳ Duplexing reversing assembly feeding roller
㉑ Duplexing reversing assembly outlet roller
㉒ Duplexing unit feeding roller
㉓ Cassette 3/4 pick-up roller
㉔ Cassette 3/4 feeding roller
㉕ Cassette 3/4 separation roller
㉕ Cassette 3/4 separation roller
㉖ Pick-up vertical path roller

Figure 1-8 (CLC800)



① External delivery roller
② 1st cassette holder
③ 2nd cassette holder
④ Cassette 1 pick-up roller
⑤ Cassette 1 feeding roller
⑥ Cassette 1 separation roller
⑦ Retention guide
⑧ Registration roller
⑨ Pre-registration roller 1
⑩ Pre-registration roller 2
⑪ Cassette 2 pick-up roller
⑫ Cassette 2 feeding roller
⑬ Cassette 2 separation roller
⑭ Multifeeder pick-up roller
⑮ Pick-up vertical path roller

Figure 1-9 (CLC700)

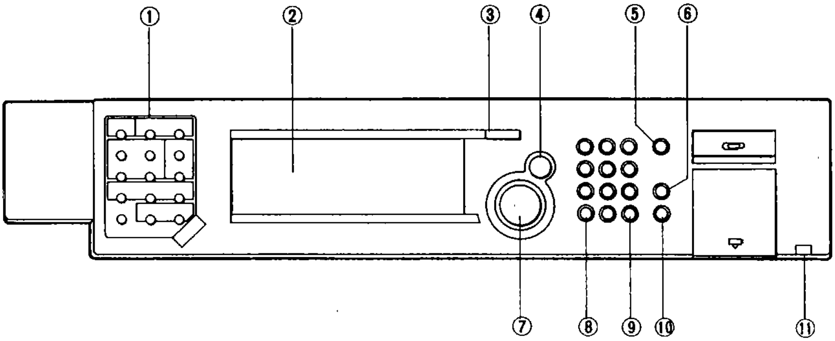


Figure 1-10

Key	Operation/function	Remarks
① Extended Copy Mode key	Press it when selecting a copy mode.	
② Message display key	Press it to display the current copy mode and settings.	
③ Reset key	Press it to cancel the current copy mode and return to standard mode.	
④ Stop key	Press it to stop continuous copying.	
⑤ Pre-Heat key	Press it to start or end pre-heat mode.	
⑥ Interrupt key	Press it to interrupt the ongoing copying run for making an extra copy.	
⑦ Start key	Press it to start copying operation.	
⑧ Clear key	Press it to change the copy count or settings.	
⑨ ID key	Press it to activate ID mode.	A press activates ID mode, requiring input of an ID for the next copy.
⑩ Call key	Press it to recall any of the most recent three copy modes.	
⑪ Pilot lamp	Comes on (green) when the power is switched on.	

Table 1-301

Instructions to the User

1. You must use manual mode when making two-sided copies (CLC700) or on thick paper (CLC700/800); be sure to reverse the curl on the leading edge of the paper before feeding it for the second time.
2. When stacking transparencies in the cassette, be sure to place paper (thick, for backing) on the bottom of the stack.
3. When stacking transparencies in the cassette or the multifeeder, be sure to separate, as by fanning out, the transparencies before placing the stack.
4. Keep in mind that copy paper may be classified into the following five:

plain paper:	regular copy paper (80 to 105 g/m^2)
thick paper:	copy paper with certain thickness (106 to 157 g/m^2)
transparency:	transparent film used for OHP
special 1:	paper identified by the Special 1 notation on the wrappings
special 2:	paper identified by the Special 2 notation on the wrappings

V. OPERATIONS

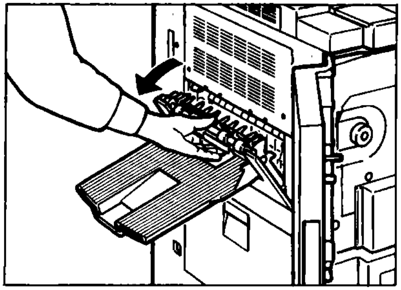
A. Removing jams

If paper jams, remove it as follows:

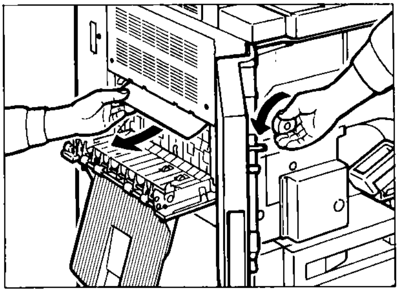
1) Open the front door (left/right).
2) Check all locations identified on the touch panel display, and remove the paper, if any.
3) Shift any levers or close any doors you have moved or opened back into position.
4) Open both left and right front doors once, and close them.

B. Jam behind the Upper Left Door

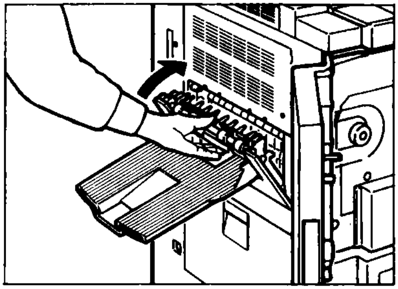
1) Open the front door (left/right).
2) Remove the copy paper from the tray. Then, hold the grip on the body, and slowly open the left door.



3) Turn the knob (green) counterclockwise, and remove the paper from the rear of the delivery assembly.



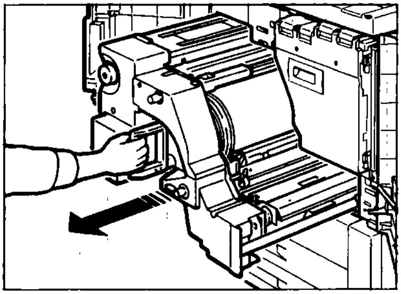
4) After removing the paper, close the left door securely.



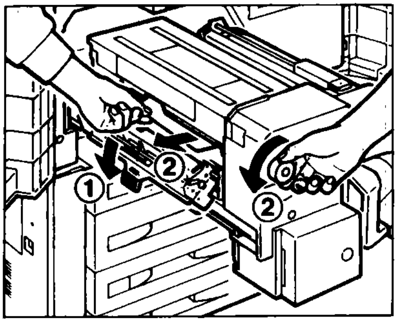
5) Close the front door.

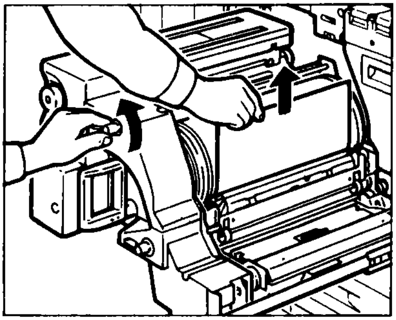
C. Jam behind the Front Door

1) Open the front door (left/right).
2) Shift the lever (green) to the left, and pull it to draw out the transfer assembly frame.

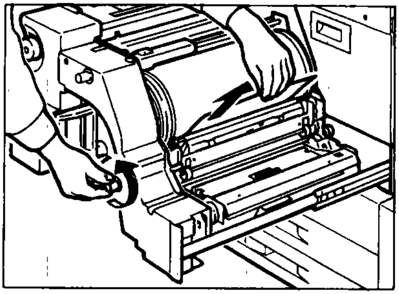


3) Turn the knob (green) counterclockwise, and remove the paper.

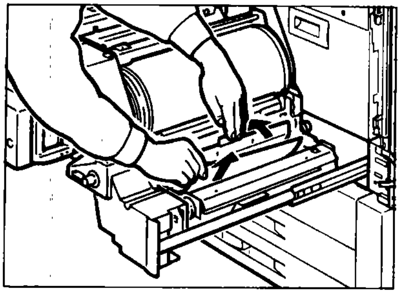




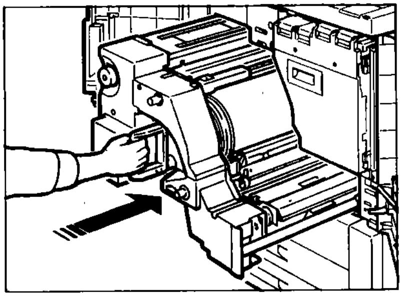
If the paper is trapped deep inside, turn the knob (green) counterclockwise to remove it.

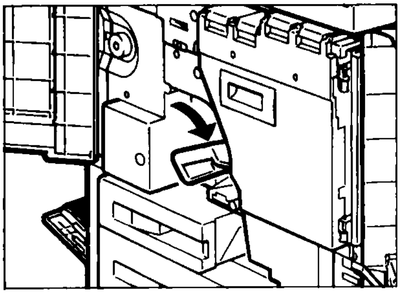


4) Shift the knob (green) up and remove the paper.



5) Push the transfer assembly frame into the copier, and put the lever (green) back into position.

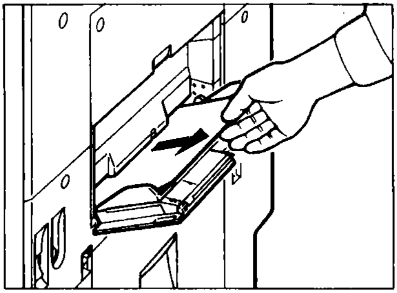




6) Close the front door (left/right).

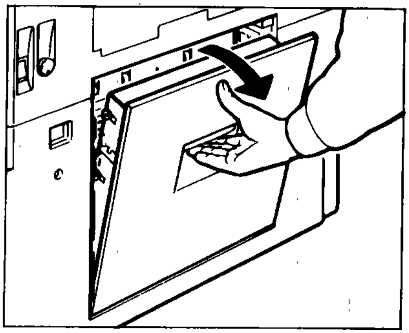
D. Paper in the Multifeeder Assembly

1) Remove the paper set in the multifeeder. Then, remove the paper jammed inside the multifeeder assembly.

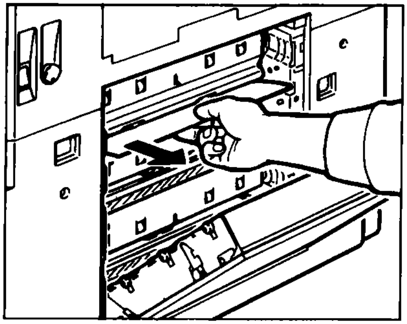


E. Paper Behind the Lower Right Door

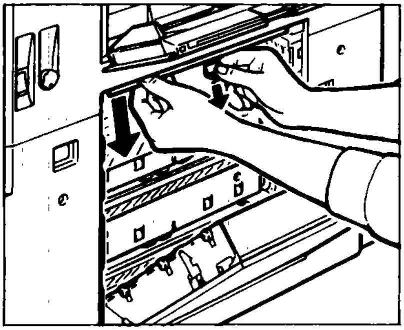
1) Open the right door of the cassette assembly.



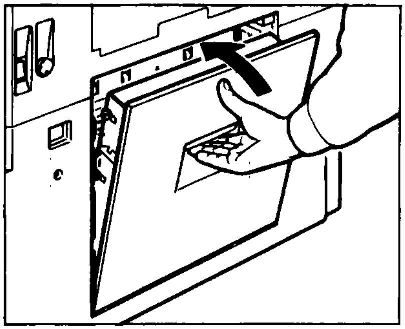
2) Remove the paper.



3) While pushing the grip (green) shown in the figure toward the lower rear, remove the paper.

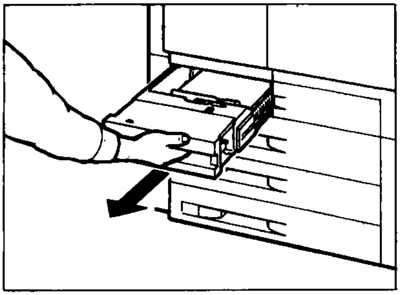


4) Close the right door of the cassette assembly securely.

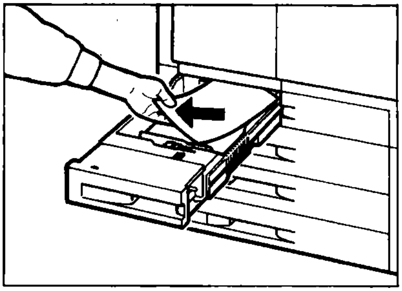


F. Paper in the Cassette Assembly

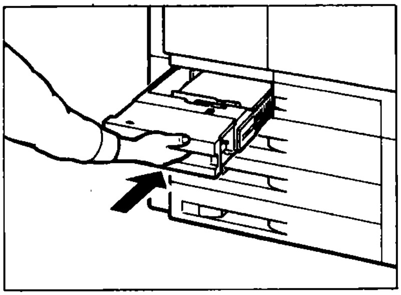
1) Draw out the cassette



2) Remove the paper jammed in the cassette.

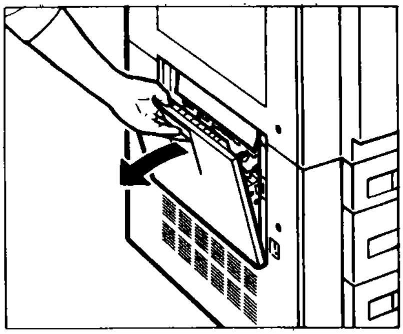


3) Put the cassette back into position.

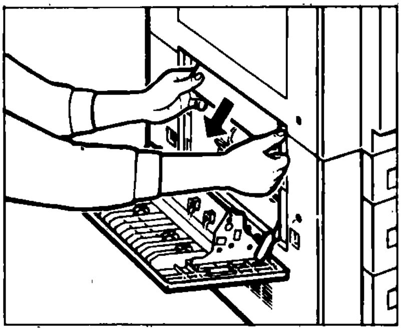


G. Paper behind the Lower Left Door

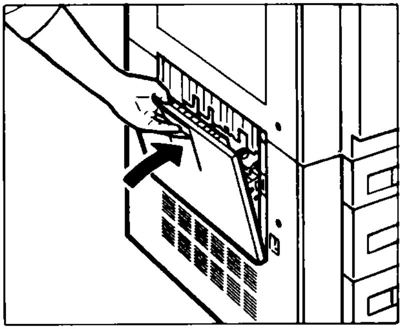
1) Open the lower left door.



2) Remove the paper.

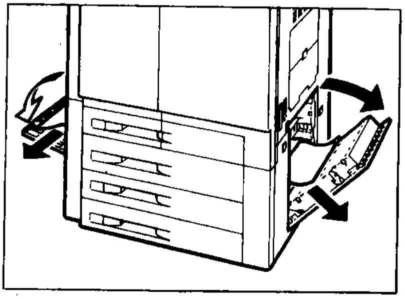


3) Close the lower left door securely.

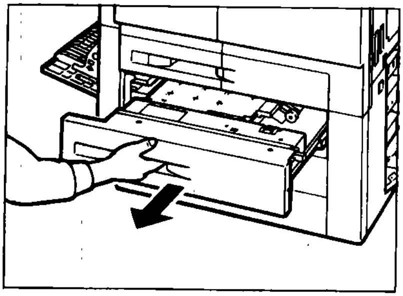


H. Paper in the Duplexing Unit Assembly

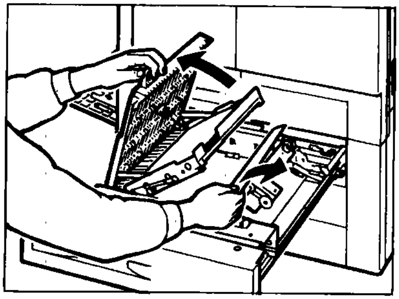
1) Open the bottom door (left/right), and remove any paper.



2) Draw out the duplexing unit.

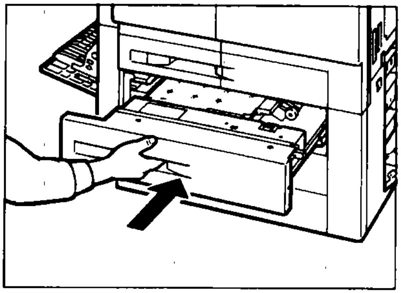


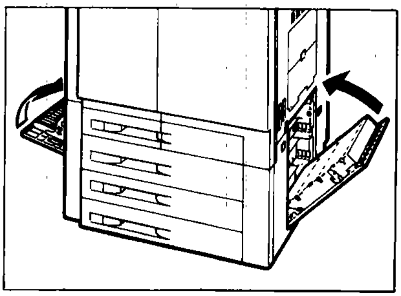
3) Open the cover shown in the figure, and remove the paper.



If any paper is half way out of the duplexing tray, remove it.

4) Put the duplexing tray back into position, and close the door of the vertical path unit (left/right) securely.

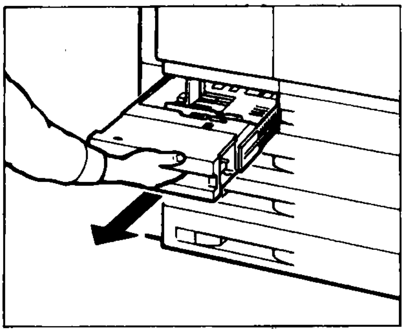




I. Supplying Paper

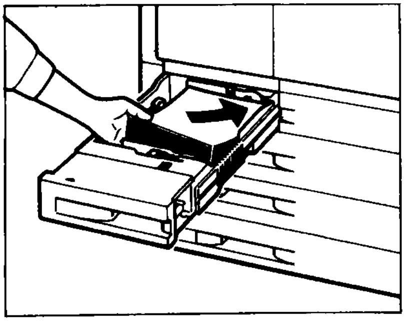
Check the display to find out which unit needs paper, and supply it with paper as follows:

1) Hold the grip on the cassette, and pull it to the front until it stops.



2) Unwrap the copy paper while keeping the following in mind:
   - Each cassette can hold 500 sheets (80 g/m^2) of copy paper.
   - Use paper of a type recommended by Canon for the best results.
   - Wrap any remaining paper, and keep it in a place protected from humidity and direct rays of the sun.
   - Do not use any of the following to avoid jams.
     - wrinkled paper, curled paper
     - thin, coarsely processed paper
   - For automatic two-sided copies, paper of 105 g/m^2 is recommended.

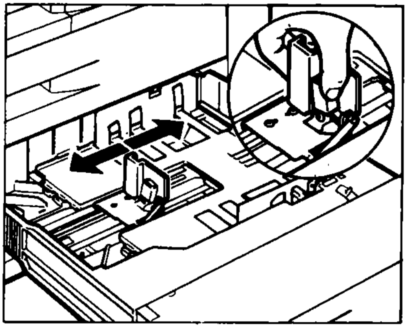
3) Put the stack of paper in the cassette. (Keep in mind that paper has face and back.)



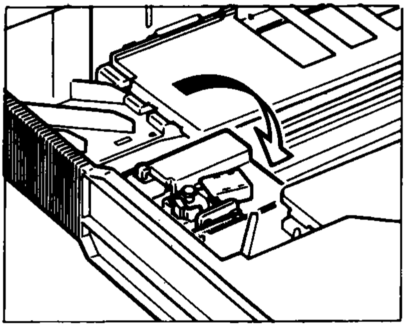
4) Hold the grip on the pick-up cassette, and push it inside the copier until a click is heard.

J. Changing the Cassette Size

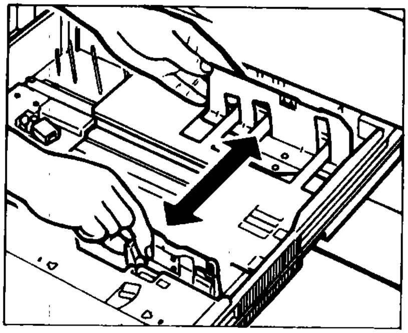
1) Hold the lever as shown in the figure, and slide the length guide to the appropriate length index.



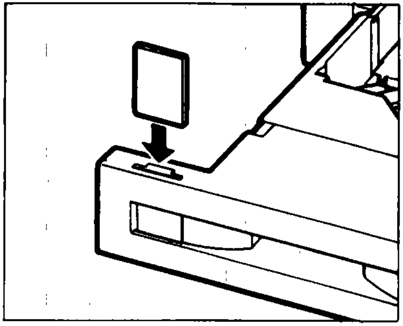
If you are cleaning the paper size to A3, slide the length guide to the left end and shift down the guide to the right.



2) Hold the lever as shown in the figure, and slide the width guide to the appropriate width index.

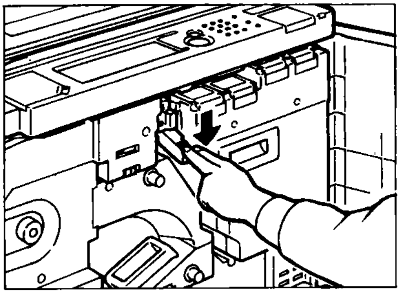


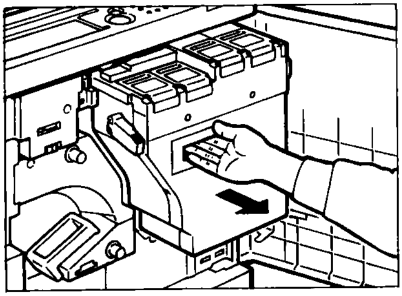
3) Replace the size plate of the cassette to suit the new paper size.



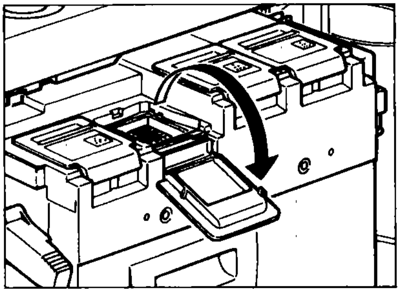
K. Supplying Toner

1) Open the front door.
2) Push down the lever, and draw out the hopper unit.

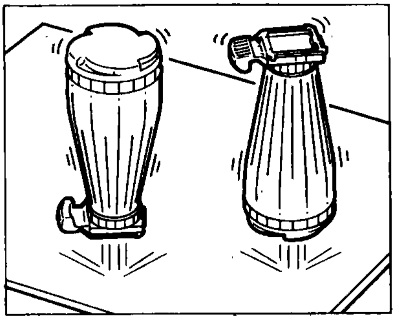




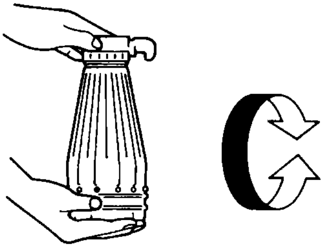
3) Open the lid on the toner supply mouth whose color is the same as the toner to be supplied.



4) While keeping its mouth at the bottom, drop the toner bottle about five times to a firm surface (desk) from a height of about 3 cm.
Then, turn over the toner bottle, and drop it about five times in the same way.

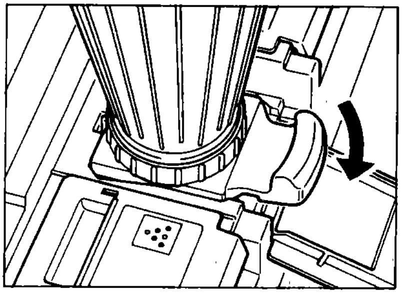


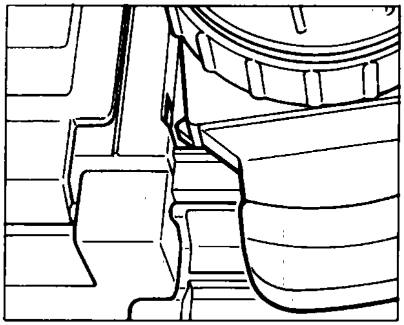
5) Hold the toner bottle with both hands, keep turning it upside down and back about 20 times.

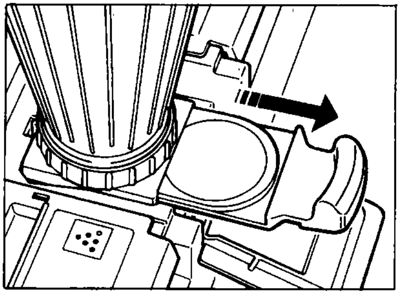


6) Fit the mouth of the toner bottle over the toner supply mouth, then turn the toner bottle clockwise until it is securely in place.

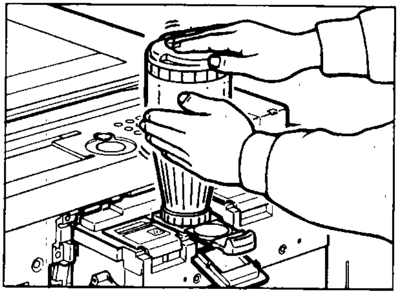
Check that the claw of the bottle is engaged with the supply mouth and the bottle is securely in place; then, pull the shutter.



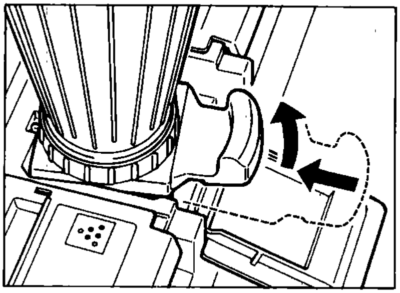




7) Lightly tap the bottom and sides of the toner bottle two to three times to make sure that all toner is out the bottle and in the hopper.



8) Close the shutter, and turn the toner bottle counterclockwise; then, lift the toner bottle slowly.

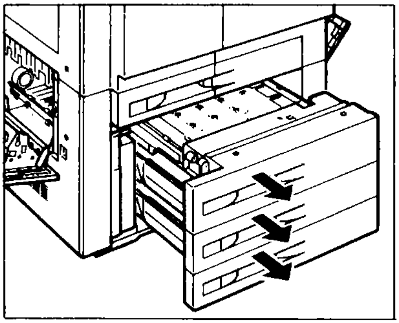


9) Close the lid of the supply mouth, and push the hopper unit back into position; then, close the front door.

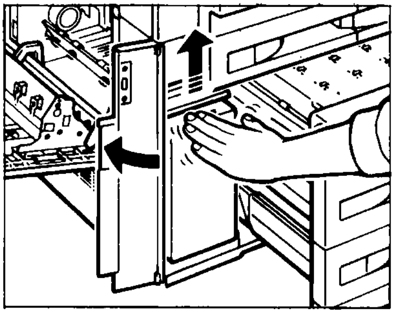
L. Collecting Waste Toner

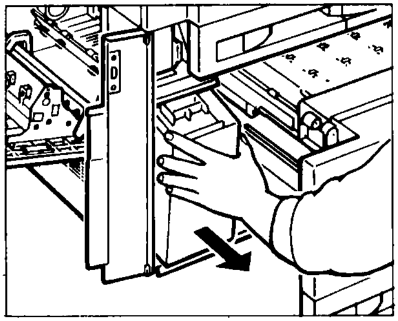
Replace the collection container with a new one as follows:

1) Open the bottom door (left/right)
2) Draw out the cassette and two-sided unit.

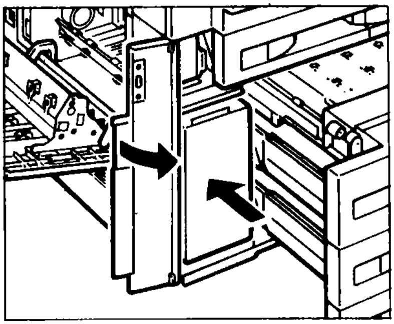


3) Open the cover in front of the waste toner container; then, while shifting up the lever, slide out the container that has become full with toner.





4) Set an empty waste toner collection container, and close the cover.



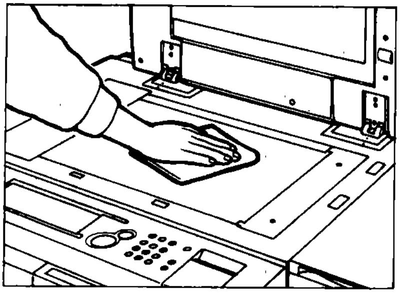
5) Put the cassette, duplexing unit, and lower door into original position.

M. Routine Maintenance

Advise the user to clean the following parts about once a week or when copies become soiled.

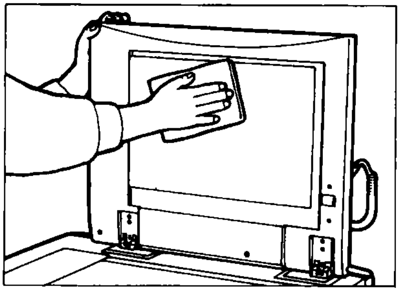
- Copyboard Glass

Wipe the glass with a cloth moistened with water or mild detergent, and dry wipe it.



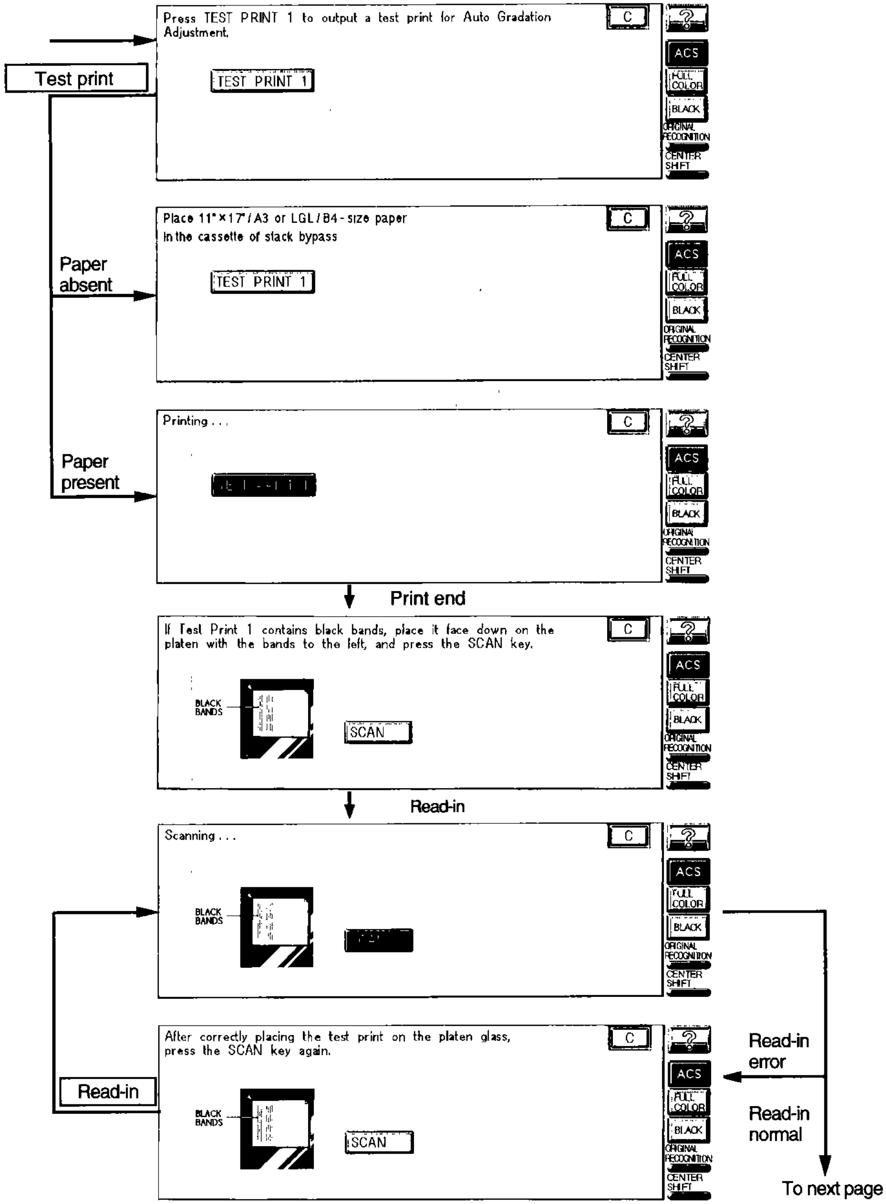
- Copyboard Cover

Wipe the sheet with a cloth moistened with water or mild detergent, and dry wipe it.



N. Using Automatic Gradation Correction

Press the User mode (*) key, and select 'automatic gradation correction'; then, follow the following instructions.



Press TEST PRINT 1 to output a test print for Auto Gradation Adjustment.

Place 11"×17"/A3 or LGL/B4-size paper in the cassette of stack bypass

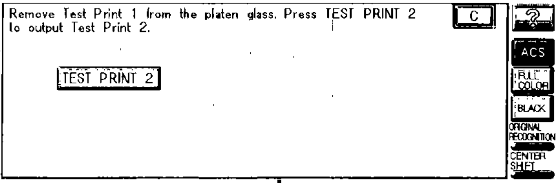
Printing . . .

If Test Print 1 contains black bands, place it face down on the platen with the bands to the left, and press the SCAN key.

Scanning . . .

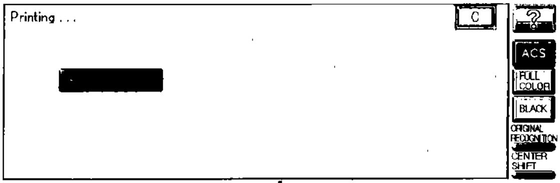
After correctly placing the test print on the platen glass, press the SCAN key again.

Test print
TEST PRINT 1
C
ACS
FULL COLOR
BLACK
ORIGINAL RECOGNITION
CENTER SHIFT
Paper absent
Paper present
Print end
BLACK BANDS
SCAN
Read-in
Read-in error
Read-in normal
To next page


Remove Test Print 1 from the platen glass. Press TEST PRINT 2 to output Test Print 2.

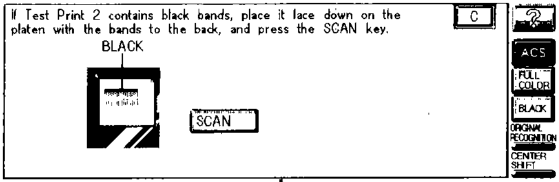
TEST PRINT 2
C
ACS
FULL COLOR
BLACK
ORIGINAL RECOGNITION
CENTER SHIFT

Test print 2


Printing . . .

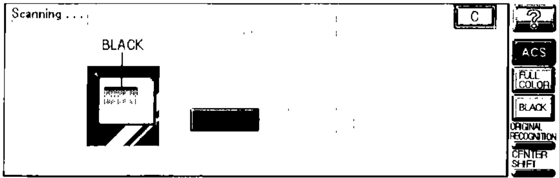
C
ACS
FULL COLOR
BLACK
ORIGINAL RECOGNITION
CENTER SHIFT

Print end


If Test Print 2 contains black bands, place it face down on the platen with the bands to the back, and press the SCAN key.

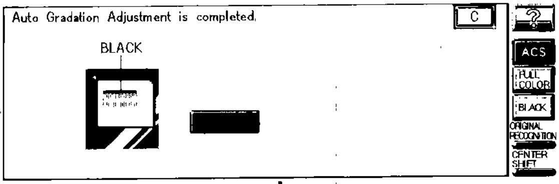
BLACK
SCAN
C
ACS
FULL COLOR
BLACK
ORIGINAL RECOGNITION
CENTER SHIFT

Read-in


Scanning . . . .

BLACK
C
ACS
FULL COLOR
BLACK
ORIGINAL RECOGNITION
CENTER SHIFT

Read-in end


Auto Gradation Adjustment is completed.

BLACK
C
ACS
FULL COLOR
BLACK
ORIGINAL RECOGNITION
CENTER SHIFT

The User Mode screen returns to end the session.

I. IMAGE FORMATION

A. Outline

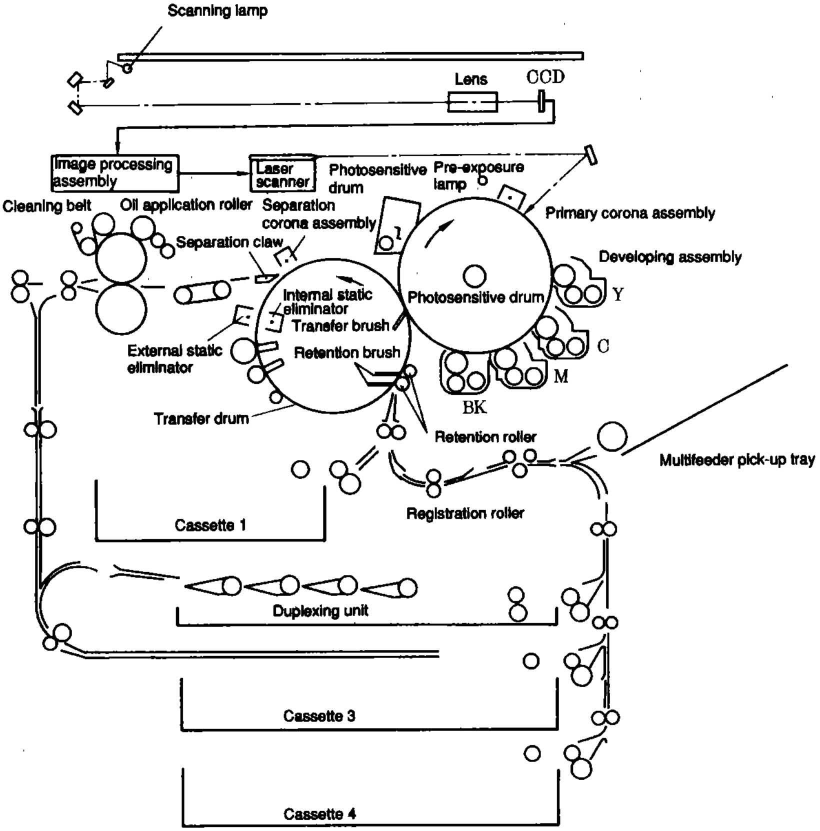

Scanning lamp
Lens
CCD
Image processing assembly
Laser scanner
Photosensitive drum
Pre-exposure lamp
Primary corona assembly
Cleaning belt
Oil application roller
Separation corona assembly
Separation claw
Developing assembly
Y
Internal static eliminator
Photosensitive drum
Transfer brush
C
External static eliminator
Retention brush
M
BK
Transfer drum
Retention roller
Multifeeder pick-up tray
Registration roller
Cassette 1
Duplexing unit
Cassette 3
Cassette 4

Figure 2-1

The copier uses a seamless drum as its photosensitive medium; see Figure 2-2 for its construction.

The photosensitive drum consists of a photoconducting outside layer made of photo-conducting material (OPC) and an aluminum base on the inside.

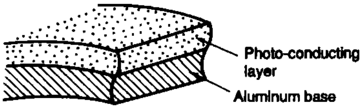


Photo-conducting layer
Aluminum base

Figure 2-2

As opposed to black-and-white copiers, the copier may be characterized by the following:

The copier illuminates a color original, and separates the reflected light into the three primary colors of light by means of filters for identification by CCDs. Based on the data from the CCDs, a laser beam is directed on the photosensitive drum to develop the color* that corresponds to each filter. The process is repeated a maximum of four times, and the resulting image is fixed on paper to produce a color copy.

* Using toner which is complementary to the color of the filter.

The repetition of the process requires retention of copy paper, and a transfer drum is provided in addition to the photosensitive drum for this purpose.

The transfer drum is identical in size with the photosensitive drum; therefore, the photosensitive drum makes a single rotation for each rotation of the transfer drum.

The copier's image formation process can be divided into the following nine steps:

Step 1	Pre-exposure
Step 2	Primary charging (-)
Step 3	Laser exposure
Step 4	Development (AC + DC bias)
Step 5	Retention (-, +)
Step 6	Transfer (-, +)
Step 7	Separation (AC + DC)
Step 8	Photosensitive drum cleaning
Step 9	Fixing

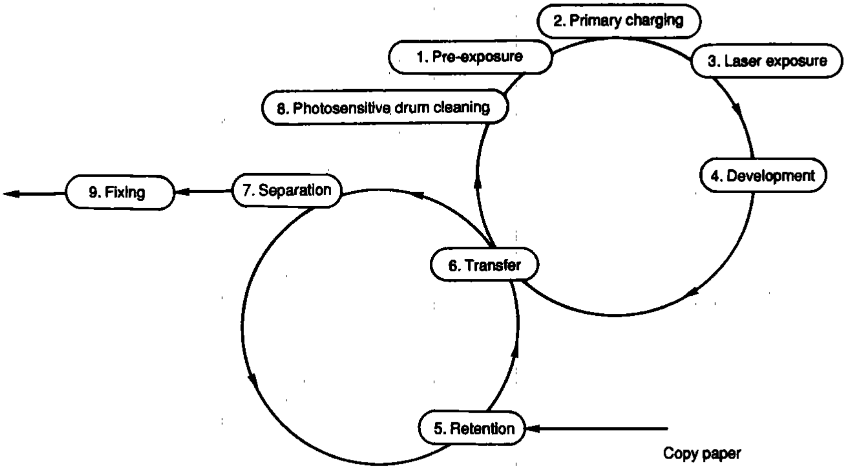

2. Primary charging
1. Pre-exposure
3. Laser exposure
8. Photosensitive drum cleaning
4. Development
9. Fixing
7. Separation
6. Transfer
5. Retention
Copy paper

Figure 2-3

B. Latent Static Image Formation Block

This block consists of three steps, ultimately leaving negative charges in areas of the drum surfaces that represent the white areas of the original and removing negative charges from those areas that represent the black areas of the original.

The image on the drum surface created by the presence/absence of negative charges is not visible to the human eye and, is therefore, called the *latent static image.*

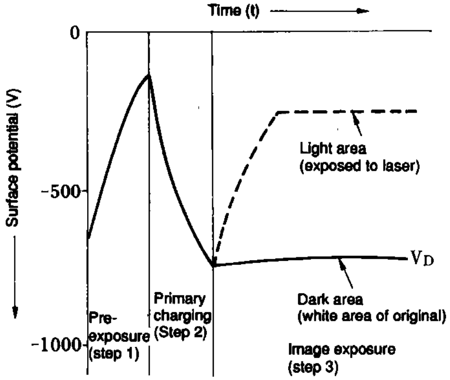


Figure 2-4

C. Pre-Exposure (step 1)

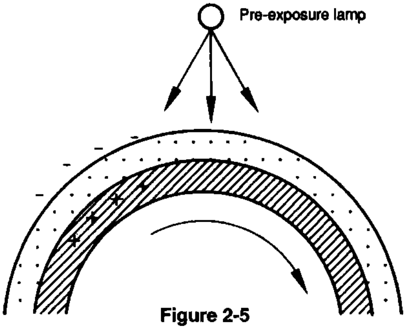


Figure 2-5

Before primary charging is executed, light from the pre-exposure lamp is directed to the drum surface to remove any residual charges from the drum surface, thereby preventing uneven copy density.

D. Primary Charging (step 2)

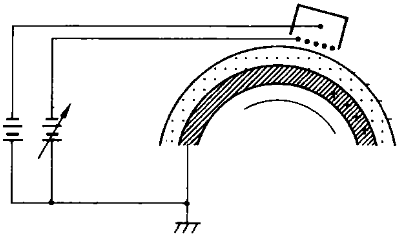


Figure 2-6

The primary corona assembly charges the drum surface with a uniform layer of negative charges to obtain primary potential.

The surface potential of the drum charged this way is determined by the potential of the grid; and, for this reason, a bias is applied to the grid to ensure a stable drum surface potential.

E. Laser Exposure (step 3)

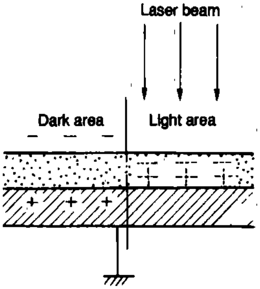


Figure 2-7

A laser beam is directed to the drum surface in such a way that will represent the dark areas of the original, thereby neutralizing the charges on the drum surface. Such areas are called the *light* areas of the photosensitive drum, and will attract toner in step 4 (development).

F. Development (step 4)

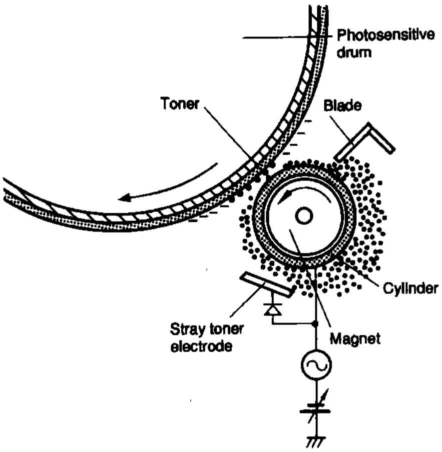

Photosensitive drum
Toner
Blade
Cylinder
Stray toner electrode
Magnet

Figure 2-8

In this step, the latent static image on the drum surface is turned into a visible image.

In the case of the copier, the light areas of the drum, i.e., areas that have been exposed to the laser beam, will receive toner which is charged to a negative potential as in primary charging.

As shown in Figure 2-8, the developing assembly consists of a developing cylinder and a magnetic blade.

The developing cylinder, on the other hand, consists of a field magnet and a cylinder that revolves around it.

The developer is composed of toner (mainly of resins and dyes) and carrier (iron powder) mixed in a specific ratio. The toner and the carrier (iron powder) become charged through friction against each other so that the toner assumes a negative potential and the carrier, positive.

The developer is held inside the magnetic field of the fixed magnet as if to cling to the cylinder surface, and a blade is used to make sure that the toner is kept in a uniform layer.

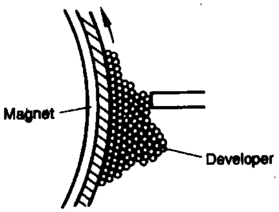

Magnet
Developer

Figure 2-9

The developing cylinder is subjected to both double blanking pulses and DC bias (negative component) simultaneously for better developing efficiency and better reproduction of highlights; for this reason, the negative component of the developing bias is higher than the positive component.

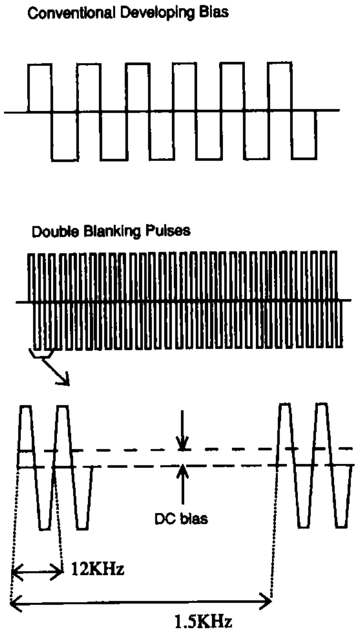

Conventional Developing Bias
Double Blanking Pulses
DC bias
12KHz
1.5KHz

Figure 2-10

During copying operation, the toner is attracted to the light areas on the photosensitive drum by the work of the drum surface potential and the negative component of the developing bias, turning the latent static image on the drum into a visible image—any excess toner is drawn off the photosensitive drum by the work of the drum surface potential and the positive component of the developing bias.

A high voltage (negative) is applied to the electrode under the cylinder of the developing assembly to prevent toner from moving astray.

G. Retention (step 5)

The copier's transfer drum does not have a gripper; instead, it uses a method in which paper is attracted from the registration roller to the transfer drum sheet by means of static electricity in a process called *retention.*

A retention brush and retention push-on roller are found where copy paper comes into contact with the transfer drum. The retention brush remains in contact with the inner side of the transfer drum sheet, and is supplied with negative charges which attract copy paper to the transfer drum sheet.

The smoothing brush and smoothing roller both serve to keep the charges on copy paper even.

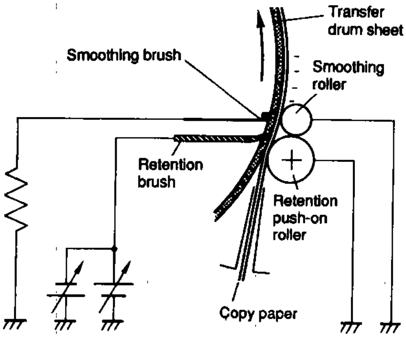


Figure 2-11

H. Transfer (step 6)

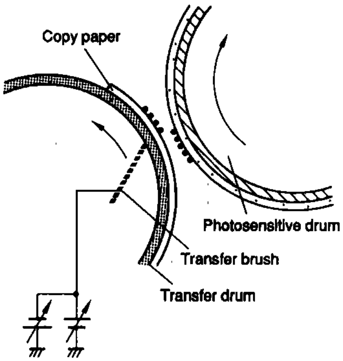

Copy paper
Photosensitive drum
Transfer brush
Transfer drum

Figure 2-12

The toner on the photosensitive drum surface is transfered to copy paper by applying negative/positive charges to the back of copy paper (inner side of the transfer drum) where copy paper and photosensitive drum are in contact with each other.

I. Separation (step 7)

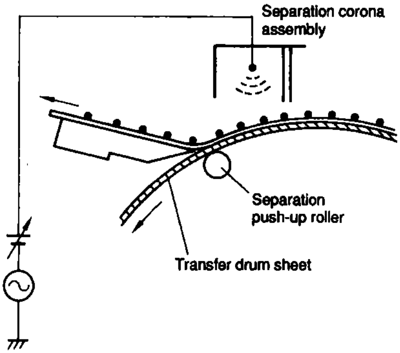

Separation corona assembly
Separation push-up roller
Transfer drum sheet

Figure 2-13

Copy paper is separated from the transfer drum using the separation claw and separation push-up roller. Since copy paper is held on the transfer drum by the work of static electricity, the separation corona assembly is used to apply an AC corona and DC bias to facilitate the separation of copy paper from the transfer drum.

J. Photosensitive Drum Cleaning (step 8)

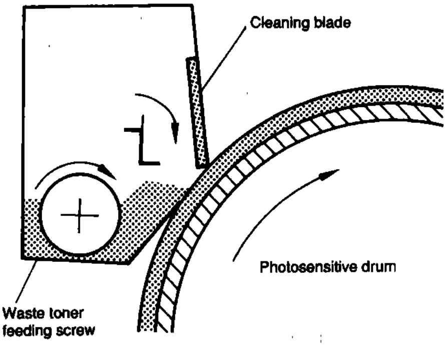

Cleaning blade
Photosensitive drum
Waste toner feeding screw

Figure 2-14

To prepare for the next copying cycle, the cleaning blade is used to scrape and collect the toner that remains on the drum surface.

The toner collected by the cleaning blade is moved toward the rear and through the back of the copier by the waste toner feeding screw for storage in the waste toner container.

K. Fixing (step 9)

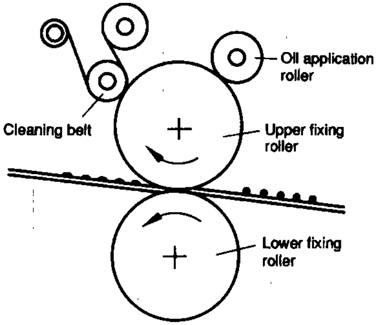

Oil application roller
Cleaning belt
Upper fixing roller
Lower fixing roller

Figure 2-15

Copy paper for which transfer has been executed as much as four times is forwarded to the fixing assembly, where it is heated by two fixing rollers. During the process, the color toners representing four colors are melted and mixed to reproduce the intended colors and, at the same time, fixed to copy paper.

To prevent adhesion of toner from copy paper to the fixing roller (called offset), the roller surface is given amounts of silicone oil as necessary. Further, the fixing roller is kept clean by a cleaning belt and blade.

II. AUXILIARY PROCESS

A. Static Eliminator

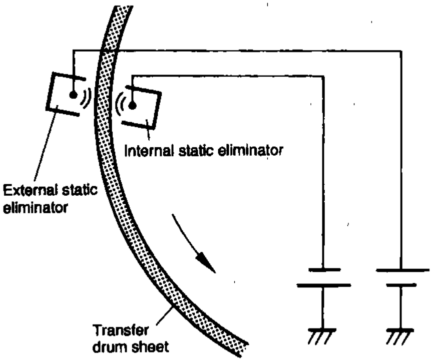

Internal static eliminator
External static eliminator
Transfer drum sheet

Figure 2-16

The charges applied to the transfer drum sheet after separation of copy paper are in any of four stages from negative to positive depending on the selected copy mode (1-color to 4-color), necessitating appropriate removal of these charges in preparation for the next retention of copy paper—in practice, negative charging is executed.

B. Transfer Drum Cleaning

The copier is equipped with transfer cleaners 1, 2, and 3 to keep the transfer drum sheet clean.

The transfer cleaner is operated during post-copying rotation, the transfer cleaner 2 is operated during post rotation that follows the making of a two-sided copy, and the transfer cleaner 3 is operated during post rotation that follows the making of a specific number of copies.

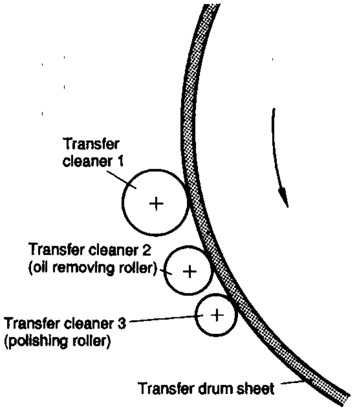

Transfer cleaner 1
Transfer cleaner 2 (oil removing roller)
Transfer cleaner 3 (polishing roller)
Transfer drum sheet

Figure 2-17

C. Ozone Filter

The exhaust fan assembly is equipped with three catalytic filters to decompose the ozone generated by each corona assembly.

III. LIMITATIONS

A. Outline

There are many difficulties in making high quality color prints by an electrophotographic process, some of which are discussed below. The Color Laser Copier has many design features to minimize these difficulties, and they are very successful.

However, the prints are not of the same quality as those in high-quality printed material, such as magazine illustrations and photographs.

Each product has its own advantages and limitations, and users of the copying machine should be made aware of the capabilities of the machine.

B. Characteristics

1. OPC

The sensitivity of the OPC used for the photosensitive drum is subject to the environment in which the machine is used and changes over time.

2. Reflectance of Toner

The ideal toners, representing the primary colors (yellow, magenta, and cyan), should absorb 100 percent of the spectrum of their complementary colors and reflect 100 percent of the rest. Such toners, however, are not available at present.

3. Dry Electrostatic Photography and Gradation

As shown in Figure 2-18, it is impossible to reproduce the density of the original document exactly the same because of the characteristics of photosensitive material and toner.

The powder toner, further, limits the details of the image to the diameter of its individual particles.

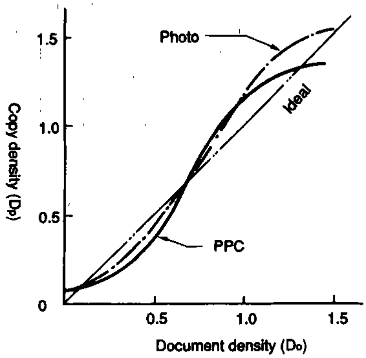


Figure 2-18

These limitations, however, have been solved to a point where they will not present visible problems by controlling the image processing and image processing by the scanner unit.

I. BASIC OPERATION

A. Functional Construction

The copier's functions may be classified into six blocks: namely, pick-up/feeding system, original exposure system, laser exposure system, image formation system, and control system.

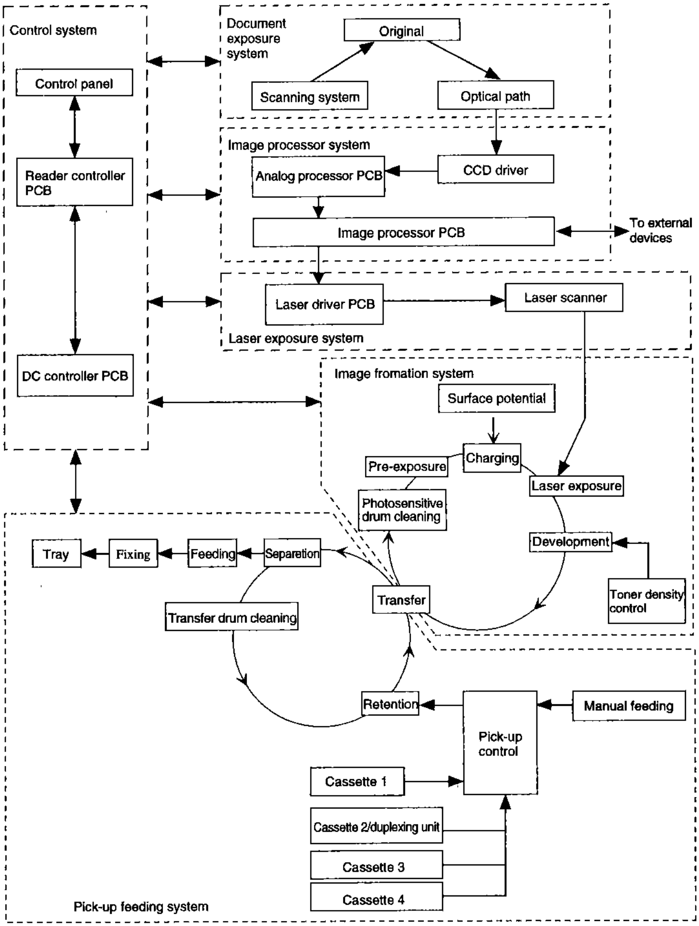

Control system
Control panel
Reader controller PCB
DC controller PCB
Document exposure system
Original
Scanning system
Optical path
Image processor system
Analog processor PCB
CCD driver
Image processor PCB
To external devices
Laser driver PCB
Laser scanner
Laser exposure system
Image fromation system
Surface potential
Pre-exposure
Charging
Laser exposure
Photosensitive drum cleaning
Development
Toner density control
Transfer
Tray
Fixing
Feeding
Separation
Transfer drum cleaning
Retention
Pick-up control
Manual feeding
Cassette 1
Cassette 2/duplexing unit
Cassette 3
Cassette 4
Pick-up feeding system

Figure 3-101

B. Electrical Circuitry

The copier's major electrical mechanisms are controlled by a microprocessor found on the reader controller PCB and DC controller PCB. The reader controller PCB and DC controller PCB each are equipped with a lithium battery for backing up the data needed by the PCBs.

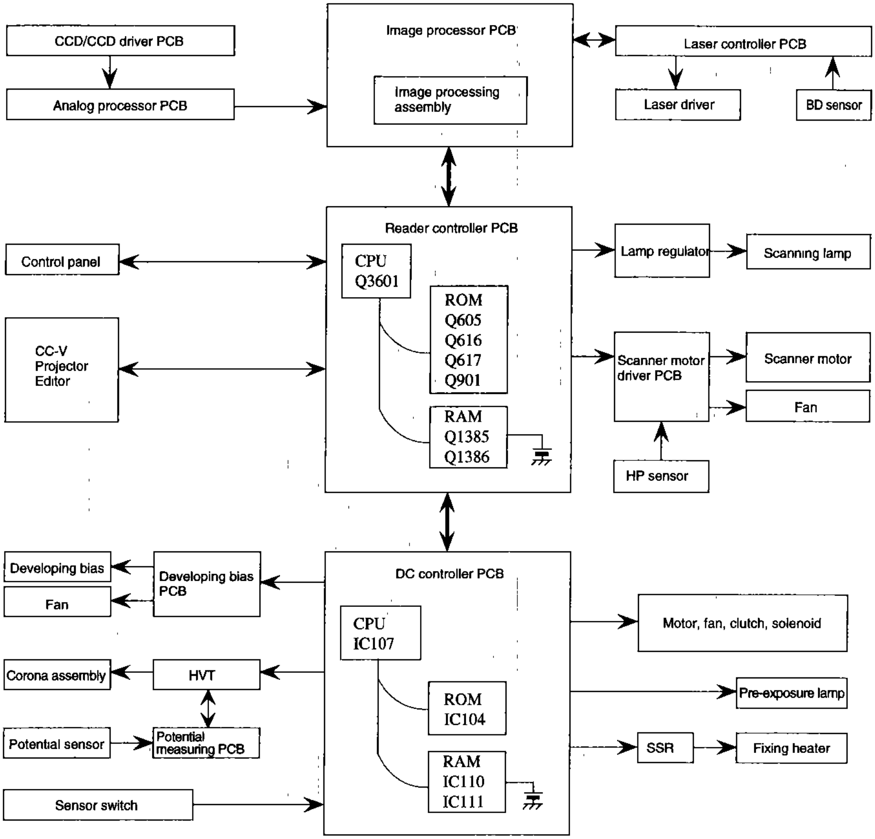

CCD/CCD driver PCB
Analog processor PCB
Image processor PCB
Image processing assembly
Laser controller PCB
Laser driver
BD sensor
Reader controller PCB
CPU Q3601
ROM Q605 Q616 Q617 Q901
RAM Q1385 Q1386
Control panel
CC-V Projector Editor
Lamp regulator
Scanning lamp
Scanner motor driver PCB
Scanner motor
Fan
HP sensor
DC controller PCB
CPU IC107
ROM IC104
RAM IC110 IC111
Developing bias
Fan
Developing bias PCB
Corona assembly
HVT
Potential sensor
Potential measuring PCB
Sensor switch
Motor, fan, clutch, solenoid
Pre-exposure lamp
SSR
Fixing heater

Figure 3-102

C. Inputs to and Outputs from Major PCBs

Inputs to and Outputs from the Reader Controller (1/3)

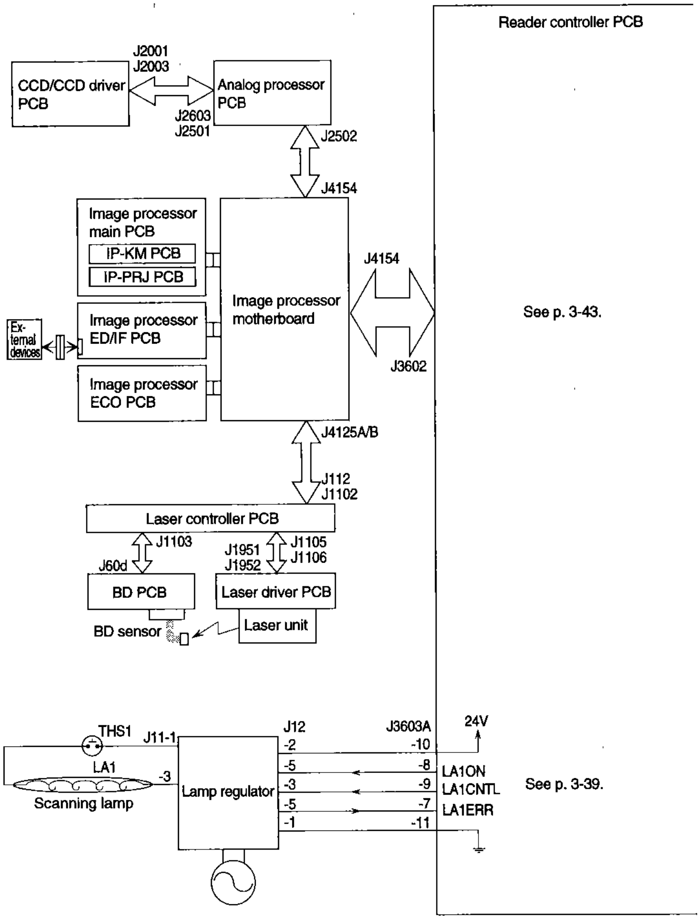

Reader controller PCB
CCD/CCD driver PCB
J2001
J2003
J2603
J2501
Analog processor PCB
J2502
J4154
Image processor main PCB
IP-KM PCB
IP-PRJ PCB
Image processor motherboard
J4154
J3602
See p. 3-43.
External devices
Image processor ED/IF PCB
Image processor ECO PCB
J4125A/B
J112
J1102
Laser controller PCB
J1103
J60d
J1951
J1952
J1105
J1106
BD PCB
Laser driver PCB
BD sensor
Laser unit
THS1
J11-1
LA1
-3
Scanning lamp
Lamp regulator
J12
-2
-5
-3
-5
-1
J3603A
-10
-8
-9
-7
-11
24V
LA1ON
LA1CNTL
LA1ERR
See p. 3-39.

Figure 3-103

Inputs to and Outputs from the Reader Controller (2/3. TYPE1)

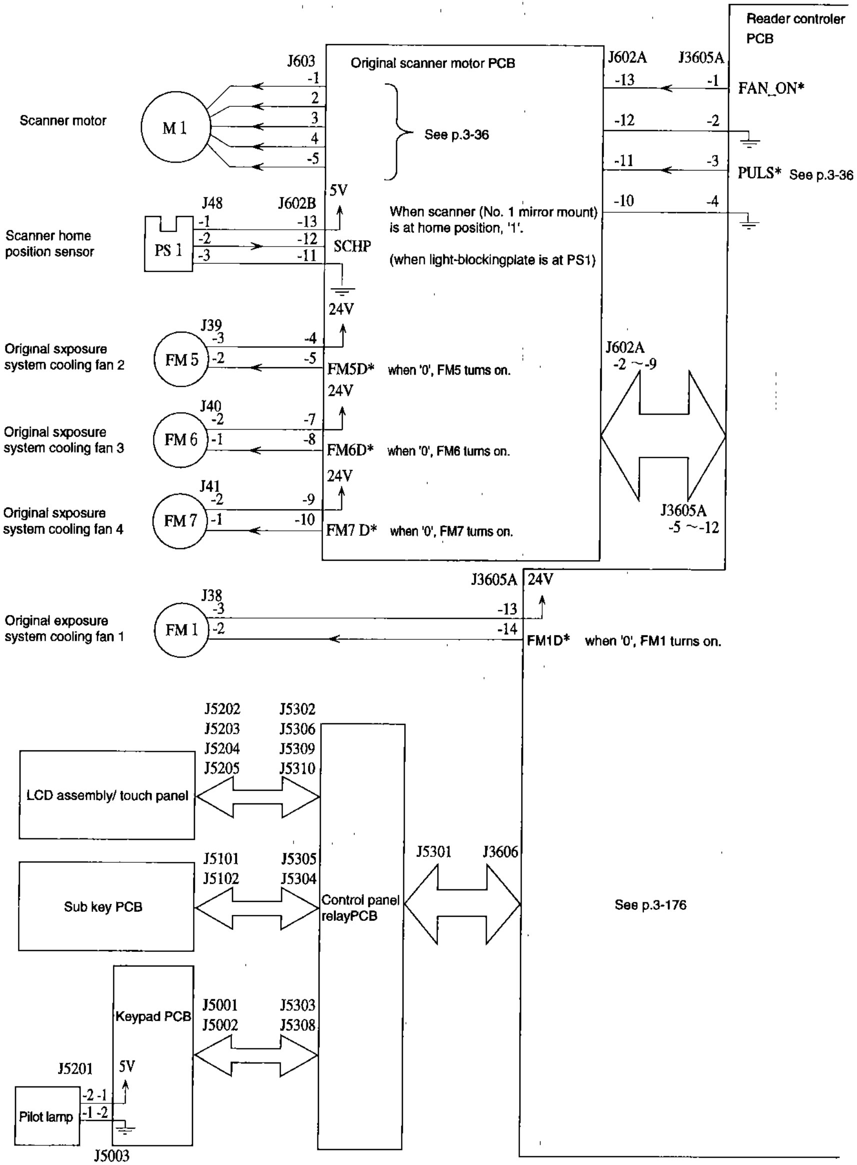

Reader controler PCB
Original scanner motor PCB
J603 -1 2 3 4 -5
Scanner motor
M1
See p.3-36
J602A J3605A
-13 -1 FAN_ON*
-12 -2
-11 -3 PULS* See p.3-36
-10 -4
5V
J48 J602B
-1 -13
-2 -12
-3 -11
Scanner home position sensor
PS 1
SCHP
When scanner (No. 1 mirror mount) is at home position, '1'.
(when light-blockingplate is at PS1)
24V
J39 -3 -2 -4 -5
Original sxposure system cooling fan 2
FM 5
FM5D* when '0', FM5 turns on.
J602A -2 ~-9
24V
J40 -2 -1 -7 -8
Original sxposure system cooling fan 3
FM 6
FM6D* when '0', FM6 turns on.
24V
J41 -2 -1 -9 -10
Original sxposure system cooling fan 4
FM 7
FM7 D* when '0', FM7 turns on.
J3605A -5 ~-12
J3605A 24V
J38 -3 -2 -13 -14
Original exposure system cooling fan 1
FM 1
FM1D* when '0', FM1 turns on.
J5202 J5302
J5203 J5306
J5204 J5309
J5205 J5310
LCD assembly/ touch panel
J5101 J5305
J5102 J5304
Sub key PCB
Control panel relayPCB
J5301 J3606
See p.3-176
Keypad PCB
J5001 J5303
J5002 J5308
J5201 5V
-2 -1
-1 -2
Pilot lamp
J5003

Figure 3-104A

Inputs to and Outputs from the Reader Controller (2/3. TYPE2)

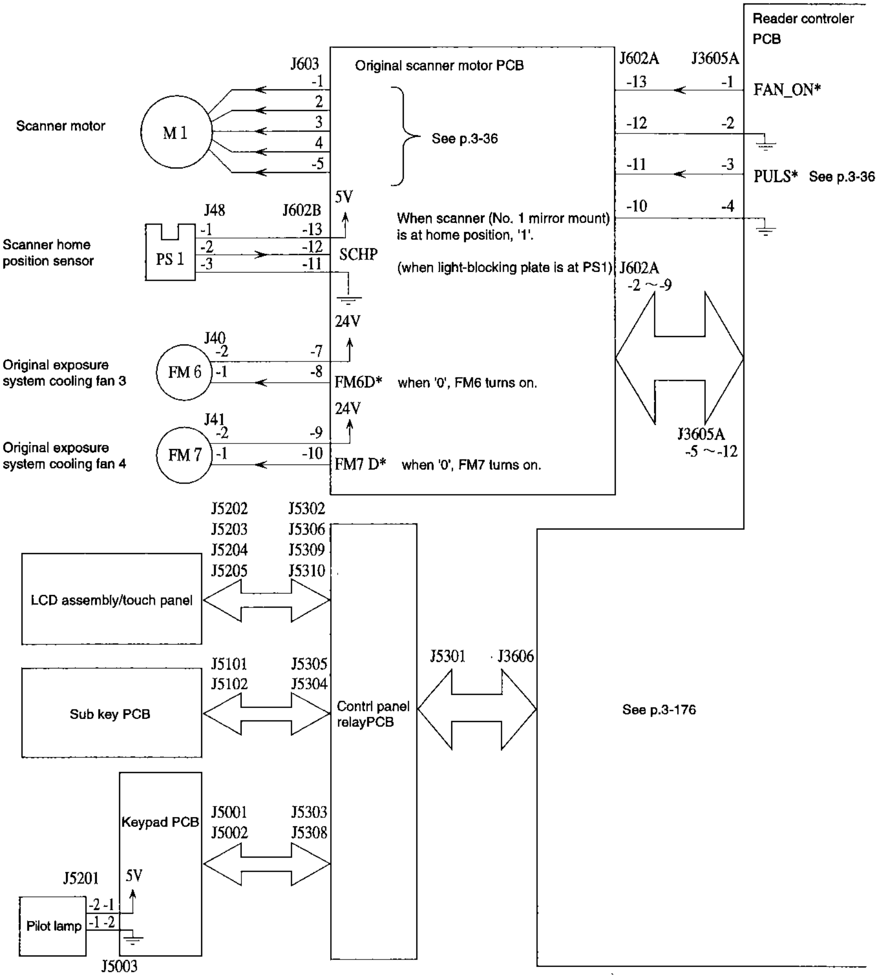

Reader controler PCB
J603
Original scanner motor PCB
J602A
J3605A
-1
-13
-1
FAN_ON*
2
Scanner motor
M1
3
-12
-2
4
See p.3-36
-5
-11
-3
PULS*
See p.3-36
5V
J48
J602B
-10
-4
When scanner (No. 1 mirror mount) is at home position, '1'.
-1
-13
Scanner home position sensor
-2
-12
SCHP
PS 1
-3
-11
(when light-blocking plate is at PS1)
J602A
-2 ~-9
24V
J40
-2
-7
Original exposure system cooling fan 3
FM 6
-1
-8
FM6D*
when '0', FM6 turns on.
24V
J41
-2
-9
J3605A
-5 ~-12
Original exposure system cooling fan 4
FM 7
-1
-10
FM7 D*
when '0', FM7 turns on.
J5202
J5302
J5203
J5306
J5204
J5309
J5205
J5310
LCD assembly/touch panel
J5101
J5305
J5301
J3606
J5102
J5304
Sub key PCB
Contrl panel relayPCB
See p.3-176
Keypad PCB
J5001
J5303
J5002
J5308
J5201
5V
-2 -1
Pilot lamp
-1 -2
J5003

Figure 3-104B

Inputs to and Outputs from the Reader Controller (3/3)

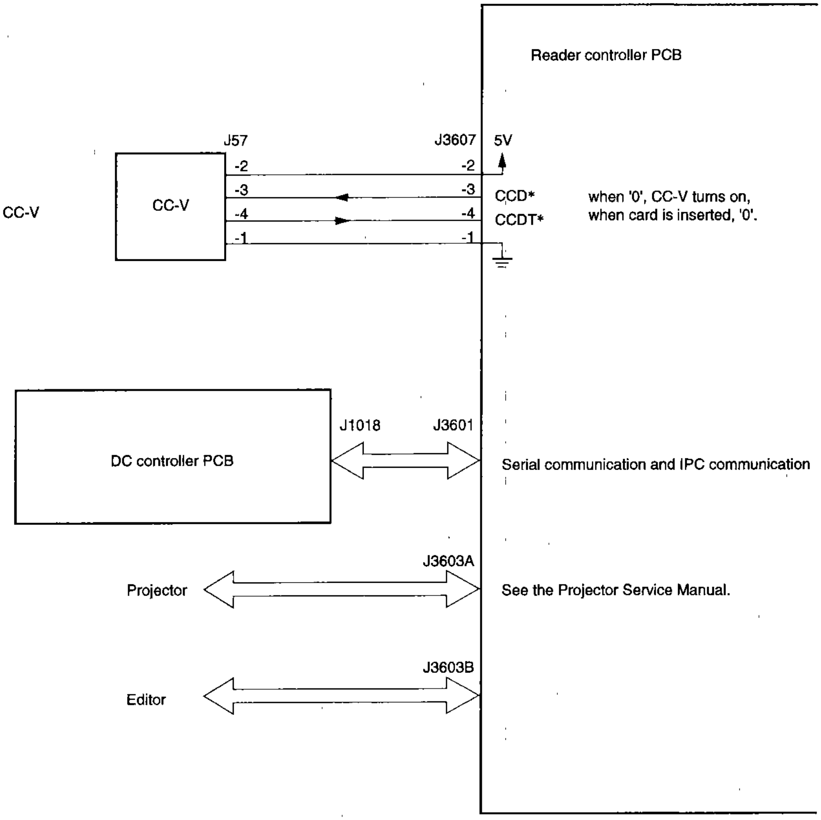

Reader controller PCB
J57
J3607
5V
-2
-2
-3
-3
-4
-4
-1
-1
CC-V
CC-V
CCD*
CCDT*
when '0', CC-V turns on,
when card is inserted, '0'.
DC controller PCB
J1018
J3601
Serial communication and IPC communication
J3603A
Projector
See the Projector Service Manual.
J3603B
Editor

Figure 3-105

Inputs to the DC Controller (1/7)

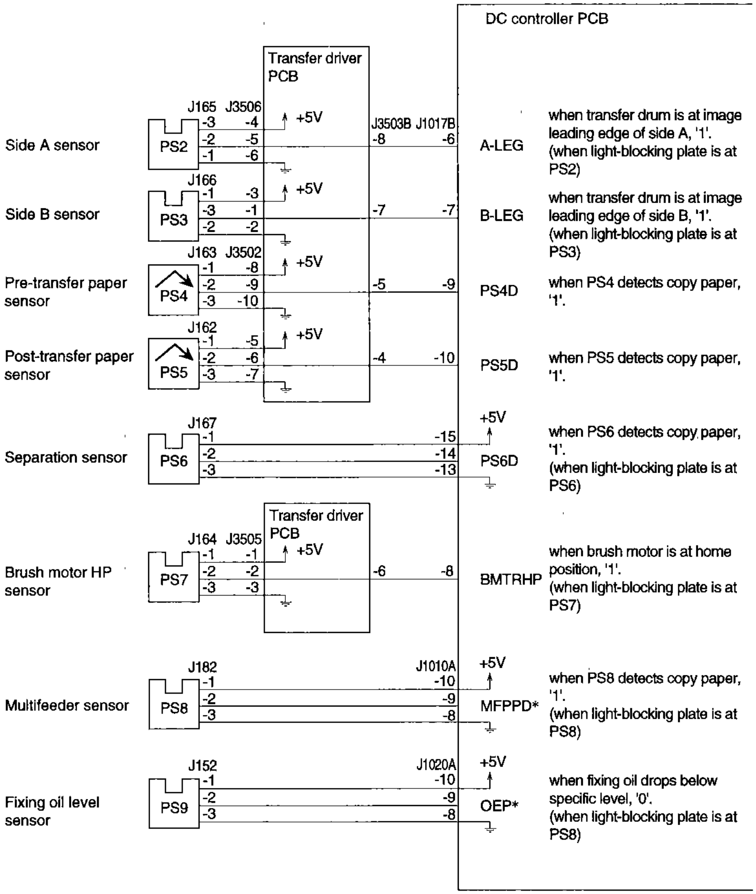
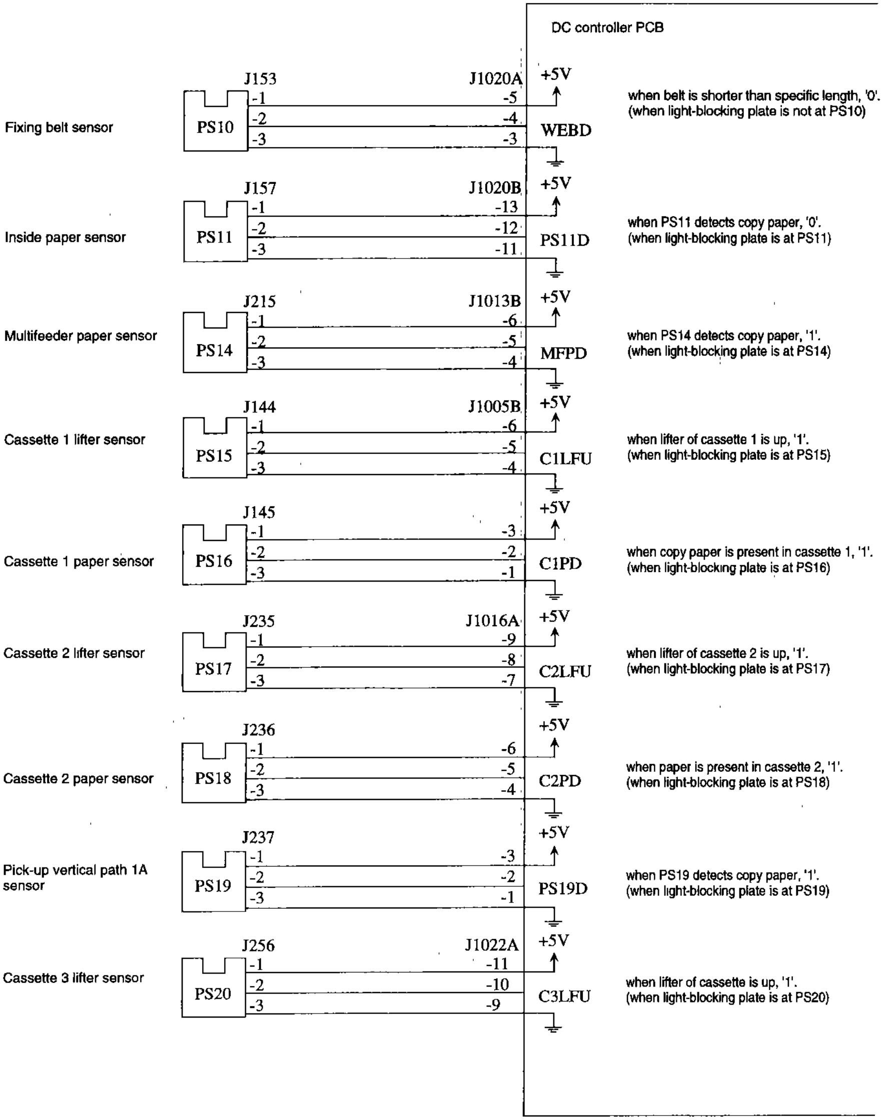

DC controller PCB
Transfer driver PCB
J165 J3506
-3 -4
-2 -5
-1 -6
+5V
J3503B J1017B
-8 -6
Side A sensor
PS2
A-LEG
when transfer drum is at image leading edge of side A, '1'. (when light-blocking plate is at PS2)
J166
-1 -3
-3 -1
-2 -2
-7 -7
Side B sensor
PS3
B-LEG
when transfer drum is at image leading edge of side B, '1'. (when light-blocking plate is at PS3)
J163 J3502
-1 -8
-2 -9
-3 -10
-5 -9
Pre-transfer paper sensor
PS4
PS4D
when PS4 detects copy paper, '1'.
J162
-1 -5
-2 -6
-3 -7
-4 -10
Post-transfer paper sensor
PS5
PS5D
when PS5 detects copy paper, '1'.
J167
-1 -15
-2 -14
-3 -13
Separation sensor
PS6
PS6D
when PS6 detects copy paper, '1'. (when light-blocking plate is at PS6)
Transfer driver PCB
J164 J3505
-1 -1
-2 -2
-3 -3
-6 -8
Brush motor HP sensor
PS7
BMTRHP
when brush motor is at home position, '1'. (when light-blocking plate is at PS7)
J182
J1010A
-1 -10
-2 -9
-3 -8
Multifeeder sensor
PS8
MFPPD*
when PS8 detects copy paper, '1'. (when light-blocking plate is at PS8)
J152
J1020A
-1 -10
-2 -9
-3 -8
Fixing oil level sensor
PS9
OEP*
when fixing oil drops below specific level, '0'. (when light-blocking plate is at PS8)

Figure 3-106

Inputs to the DC Controller PCB (2/7)


DC controller PCB
Fixing belt sensor
PS10
J153
-1
-2
-3
J1020A
-5
-4
-3
+5V
WEBD
Inside paper sensor
PS11
J157
-1
-2
-3
J1020B
-13
-12
-11
+5V
PS11D
Multifeeder paper sensor
PS14
J215
-1
-2
-3
J1013B
-6
-5
-4
+5V
MFPD
Cassette 1 lifter sensor
PS15
J144
-1
-2
-3
J1005B
-6
-5
-4
+5V
C1LFU
Cassette 1 paper sensor
PS16
J145
-1
-2
-3
-3
-2
-1
+5V
C1PD
Cassette 2 lifter sensor
PS17
J235
-1
-2
-3
J1016A
-9
-8
-7
+5V
C2LFU
Cassette 2 paper sensor
PS18
J236
-1
-2
-3
-6
-5
-4
+5V
C2PD
Pick-up vertical path 1A sensor
PS19
J237
-1
-2
-3
-3
-2
-1
+5V
PS19D
Cassette 3 lifter sensor
PS20
J256
-1
-2
-3
J1022A
-11
-10
-9
+5V
C3LFU

when belt is shorter than specific length, '0'.
(when light-blocking plate is not at PS10)

when PS11 detects copy paper, '0'.
(when light-blocking plate is at PS11)

when PS14 detects copy paper, '1'.
(when light-blocking plate is at PS14)

when lifter of cassette 1 is up, '1'.
(when light-blocking plate is at PS15)

when copy paper is present in cassette 1, '1'.
(when light-blocking plate is at PS16)

when lifter of cassette 2 is up, '1'.
(when light-blocking plate is at PS17)

when paper is present in cassette 2, '1'.
(when light-blocking plate is at PS18)

when PS19 detects copy paper, '1'.
(when light-blocking plate is at PS19)

when lifter of cassette is up, '1'.
(when light-blocking plate is at PS20)

Figure 3-107

Inputs to the DC controller PCB (3/7)

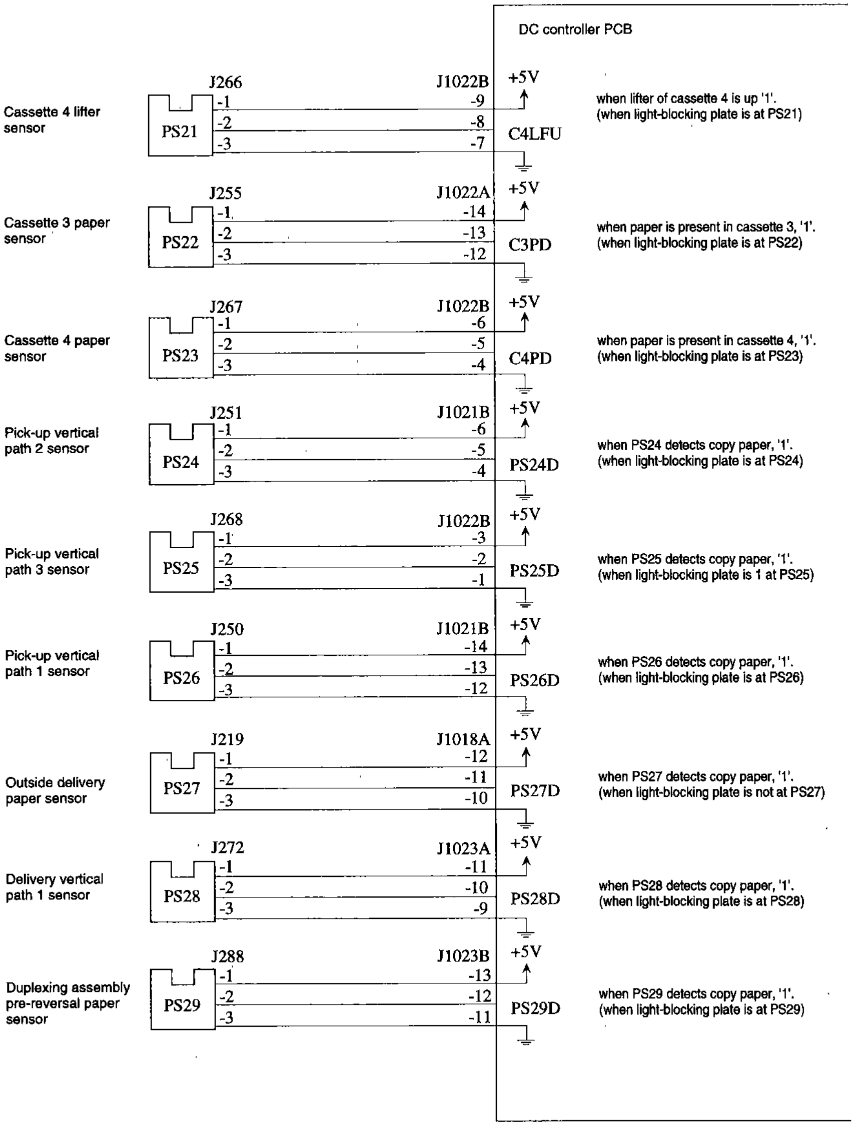
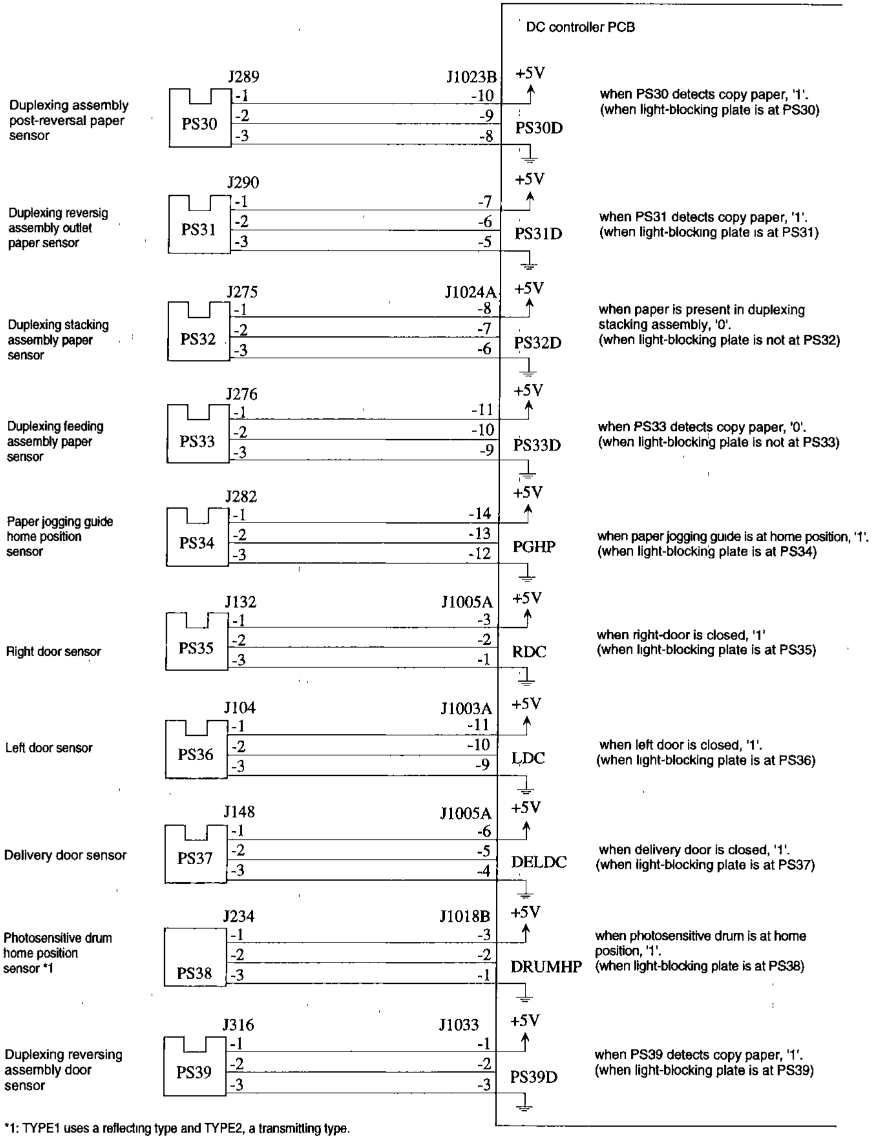

DC controller PCB
Cassette 4 lifter sensor
PS21
J266
-1
-2
-3
J1022B
-9
-8
-7
+5V
C4LFU
when lifter of cassette 4 is up '1'.
(when light-blocking plate is at PS21)
Cassette 3 paper sensor
PS22
J255
-1
-2
-3
J1022A
-14
-13
-12
+5V
C3PD
when paper is present in cassette 3, '1'.
(when light-blocking plate is at PS22)
Cassette 4 paper sensor
PS23
J267
-1
-2
-3
J1022B
-6
-5
-4
+5V
C4PD
when paper is present in cassette 4, '1'.
(when light-blocking plate is at PS23)
Pick-up vertical path 2 sensor
PS24
J251
-1
-2
-3
J1021B
-6
-5
-4
+5V
PS24D
when PS24 detects copy paper, '1'.
(when light-blocking plate is at PS24)
Pick-up vertical path 3 sensor
PS25
J268
-1
-2
-3
J1022B
-3
-2
-1
+5V
PS25D
when PS25 detects copy paper, '1'.
(when light-blocking plate is 1 at PS25)
Pick-up vertical path 1 sensor
PS26
J250
-1
-2
-3
J1021B
-14
-13
-12
+5V
PS26D
when PS26 detects copy paper, '1'.
(when light-blocking plate is at PS26)
Outside delivery paper sensor
PS27
J219
-1
-2
-3
J1018A
-12
-11
-10
+5V
PS27D
when PS27 detects copy paper, '1'.
(when light-blocking plate is not at PS27)
Delivery vertical path 1 sensor
PS28
J272
-1
-2
-3
J1023A
-11
-10
-9
+5V
PS28D
when PS28 detects copy paper, '1'.
(when light-blocking plate is at PS28)
Duplexing assembly pre-reversal paper sensor
PS29
J288
-1
-2
-3
J1023B
-13
-12
-11
+5V
PS29D
when PS29 detects copy paper, '1'.
(when light-blocking plate is at PS29)

Figure 3-108

Inputs to the DC Controller PCB (4/7)


DC controller PCB
Duplexing assembly post-reversal paper sensor
PS30
J289
-1
-2
-3
J1023B
-10
-9
-8
+5V
PS30D
when PS30 detects copy paper, '1'.
(when light-blocking plate is at PS30)
Duplexing reversig assembly outlet paper sensor
PS31
J290
-1
-2
-3
-7
-6
-5
+5V
PS31D
when PS31 detects copy paper, '1'.
(when light-blocking plate is at PS31)
Duplexing stacking assembly paper sensor
PS32
J275
-1
-2
-3
J1024A
-8
-7
-6
+5V
PS32D
when paper is present in duplexing stacking assembly, '0'.
(when light-blocking plate is not at PS32)
Duplexing feeding assembly paper sensor
PS33
J276
-1
-2
-3
-11
-10
-9
+5V
PS33D
when PS33 detects copy paper, '0'.
(when light-blocking plate is not at PS33)
Paper jogging guide home position sensor
PS34
J282
-1
-2
-3
-14
-13
-12
+5V
PGHP
when paper jogging guide is at home position, '1'.
(when light-blocking plate is at PS34)
Right door sensor
PS35
J132
-1
-2
-3
J1005A
-3
-2
-1
+5V
RDC
when right-door is closed, '1'
(when light-blocking plate is at PS35)
Left door sensor
PS36
J104
-1
-2
-3
J1003A
-11
-10
-9
+5V
LDC
when left door is closed, '1'.
(when light-blocking plate is at PS36)
Delivery door sensor
PS37
J148
-1
-2
-3
J1005A
-6
-5
-4
+5V
DELDC
when delivery door is closed, '1'.
(when light-blocking plate is at PS37)
Photosensitive drum home position sensor *1
PS38
J234
-1
-2
-3
J1018B
-3
-2
-1
+5V
DRUMHP
when photosensitive drum is at home position, '1'.
(when light-blocking plate is at PS38)
Duplexing reversing assembly door sensor
PS39
J316
-1
-2
-3
J1033
-1
-2
-3
+5V
PS39D
when PS39 detects copy paper, '1'.
(when light-blocking plate is at PS39)

*1: TYPE1 uses a reflecting type and TYPE2, a transmitting type.

Figure 3-109

Inputs to the DC Controller PCB (5/7)

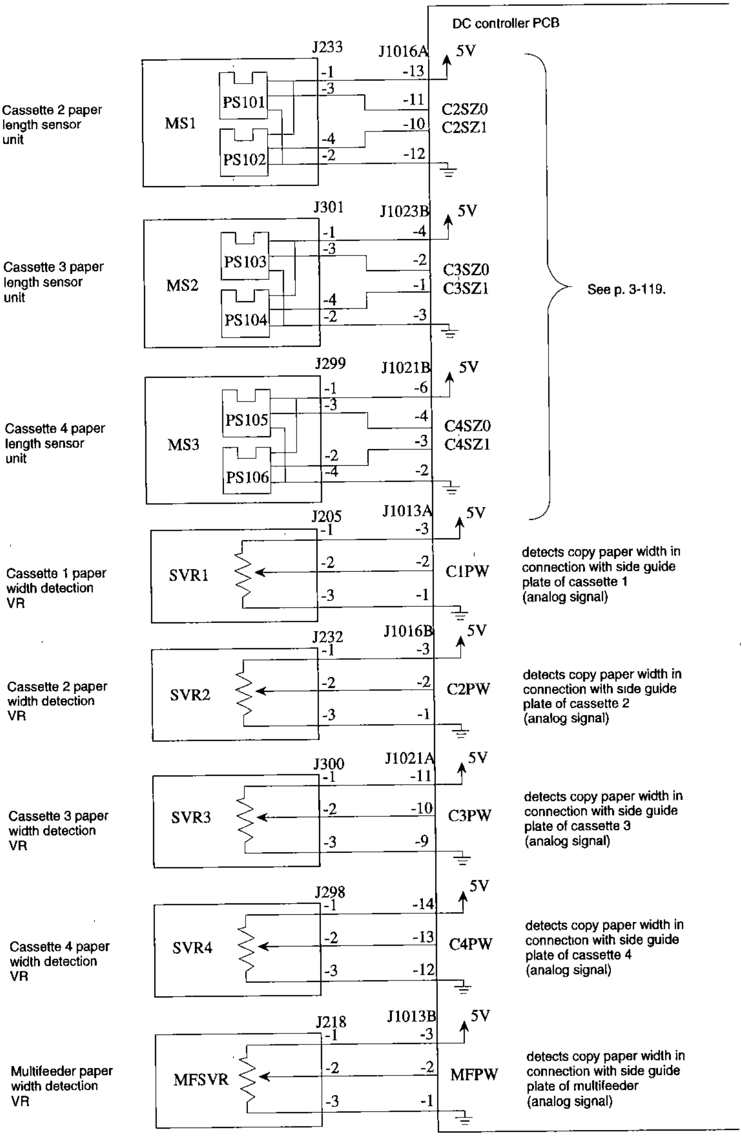

DC controller PCB
Cassette 2 paper length sensor unit
MS1
PS101
PS102
J233
-1
-3
-4
-2
J1016A
-13
-11
-10
-12
5V
C2SZ0
C2SZ1
Cassette 3 paper length sensor unit
MS2
PS103
PS104
J301
-1
-3
-4
-2
J1023B
-4
-2
-1
-3
5V
C3SZ0
C3SZ1
Cassette 4 paper length sensor unit
MS3
PS105
PS106
J299
-1
-3
-2
-4
J1021B
-6
-4
-3
-2
5V
C4SZ0
C4SZ1
See p. 3-119.
Cassette 1 paper width detection VR
SVR1
J205
-1
-2
-3
J1013A
-3
-2
-1
5V
C1PW
detects copy paper width in connection with side guide plate of cassette 1 (analog signal)
Cassette 2 paper width detection VR
SVR2
J232
-1
-2
-3
J1016B
-3
-2
-1
5V
C2PW
detects copy paper width in connection with side guide plate of cassette 2 (analog signal)
Cassette 3 paper width detection VR
SVR3
J300
-1
-2
-3
J1021A
-11
-10
-9
5V
C3PW
detects copy paper width in connection with side guide plate of cassette 3 (analog signal)
Cassette 4 paper width detection VR
SVR4
J298
-1
-2
-3
-14
-13
-12
5V
C4PW
detects copy paper width in connection with side guide plate of cassette 4 (analog signal)
Multifeeder paper width detection VR
MFSVR
J218
-1
-2
-3
J1013B
-3
-2
-1
5V
MFPW
detects copy paper width in connection with side guide plate of multifeeder (analog signal)

Figure 3-110

Inputs to the DC Controller PCB (6/7)

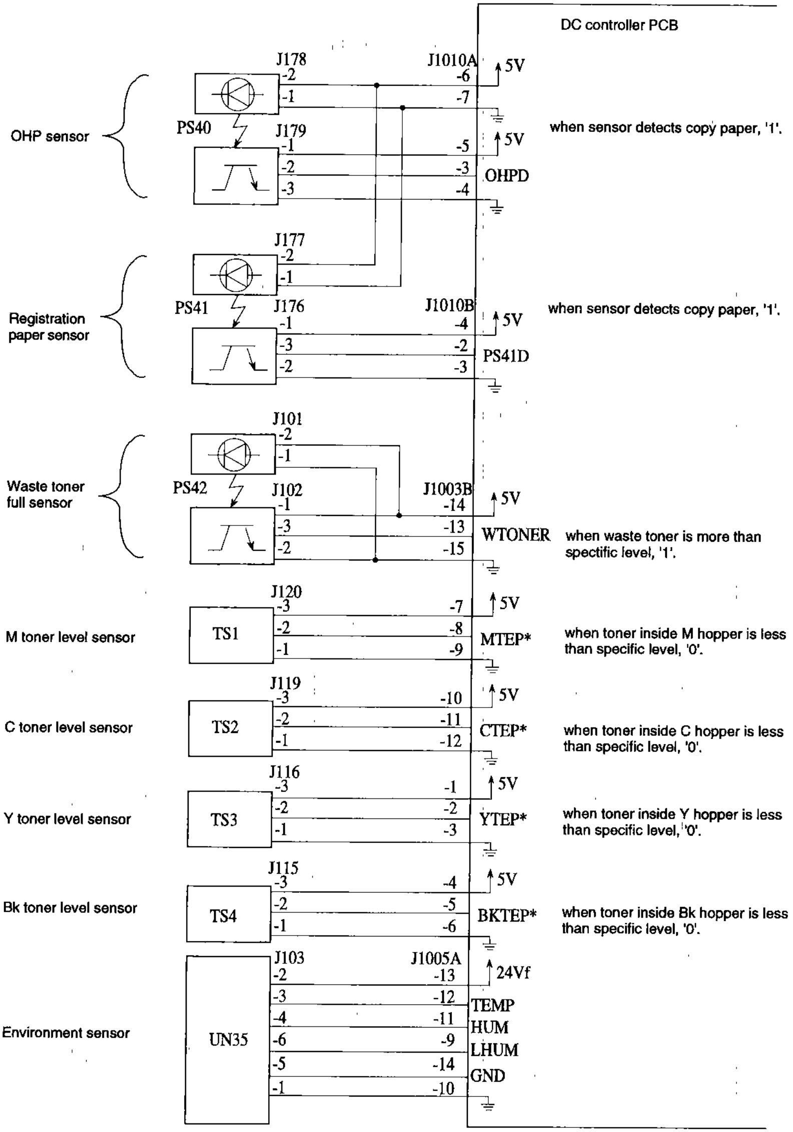

DC controller PCB
OHP sensor
PS40
J178
-2
-1
J179
-1
-2
-3
J1010A
-6
-7
-5
-3
-4
5V
5V
OHPD
when sensor detects copy paper, '1'.
Registration paper sensor
PS41
J177
-2
-1
J176
-1
-3
-2
J1010B
-4
-2
-3
5V
PS41D
when sensor detects copy paper, '1'.
Waste toner full sensor
PS42
J101
-2
-1
J102
-1
-3
-2
J1003B
-14
-13
-15
5V
WTONER
when waste toner is more than spectific level, '1'.
M toner level sensor
TS1
J120
-3
-2
-1
-7
-8
-9
5V
MTEP*
when toner inside M hopper is less than specific level, '0'.
C toner level sensor
TS2
J119
-3
-2
-1
-10
-11
-12
5V
CTEP*
when toner inside C hopper is less than specific level, '0'.
Y toner level sensor
TS3
J116
-3
-2
-1
-1
-2
-3
5V
YTEP*
when toner inside Y hopper is less than specific level, '0'.
Bk toner level sensor
TS4
J115
-3
-2
-1
-4
-5
-6
5V
BKTEP*
when toner inside Bk hopper is less than specific level, '0'.
Environment sensor
UN35
J103
-2
-3
-4
-6
-5
-1
J1005A
-13
-12
-11
-9
-14
-10
24Vf
TEMP
HUM
LHUM
GND

Figure 3-111

Inputs to the DC Controller PCB (7/7)

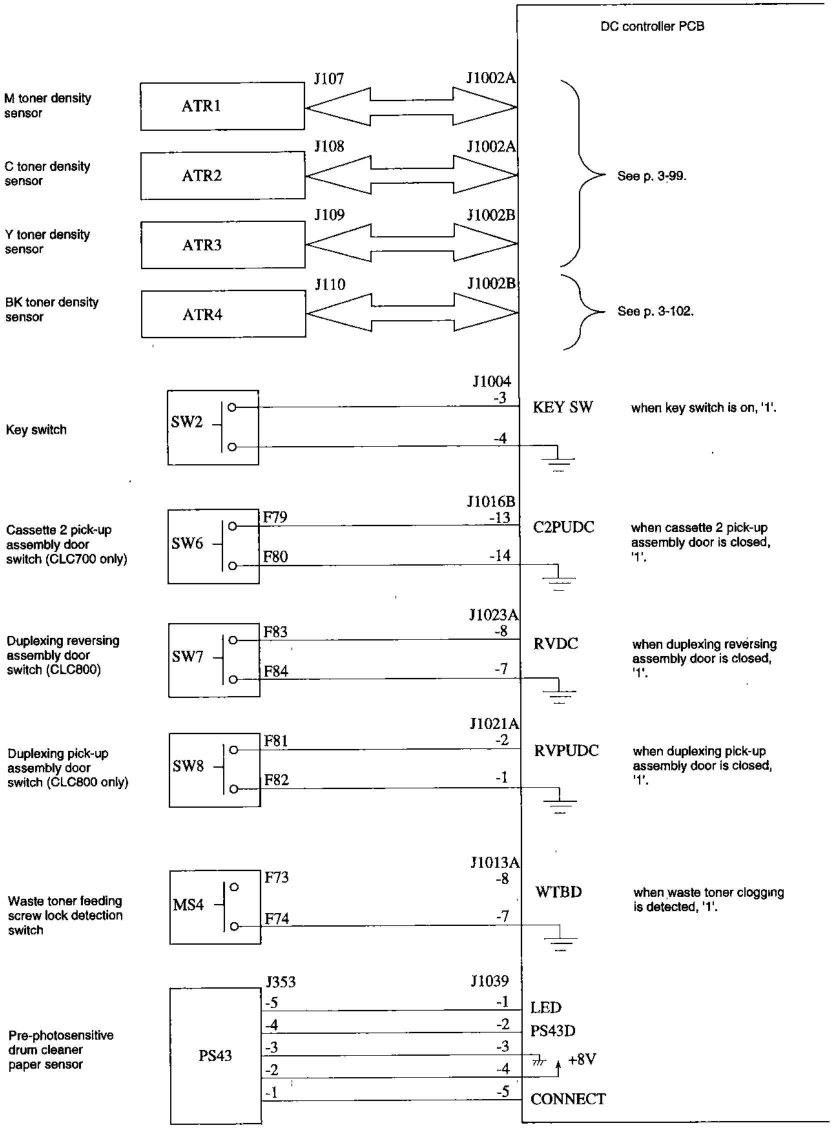
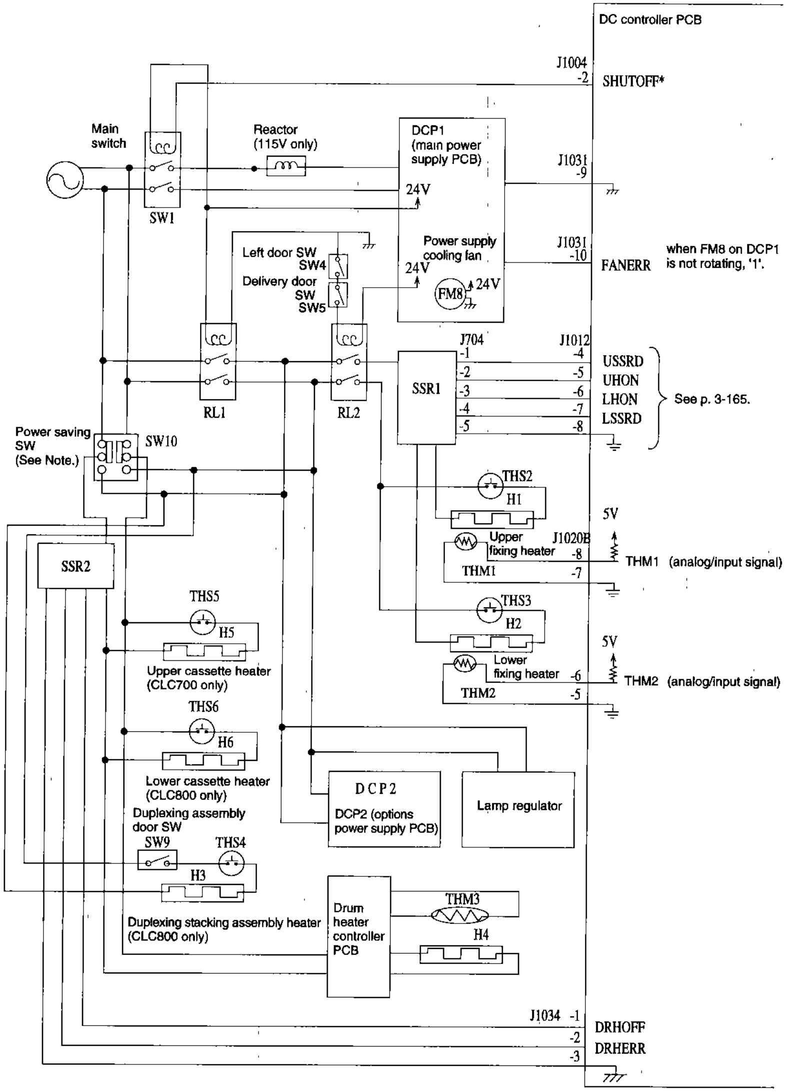

DC controller PCB
M toner density sensor
ATR1
J107
J1002A
C toner density sensor
ATR2
J108
J1002A
Y toner density sensor
ATR3
J109
J1002B
See p. 3-99.
BK toner density sensor
ATR4
J110
J1002B
See p. 3-102.
Key switch
SW2
J1004
-3
-4
KEY SW
when key switch is on, '1'.
Cassette 2 pick-up assembly door switch (CLC700 only)
SW6
F79
F80
J1016B
-13
-14
C2PUDC
when cassette 2 pick-up assembly door is closed, '1'.
Duplexing reversing assembly door switch (CLC800)
SW7
F83
F84
J1023A
-8
-7
RVDC
when duplexing reversing assembly door is closed, '1'.
Duplexing pick-up assembly door switch (CLC800 only)
SW8
F81
F82
J1021A
-2
-1
RVPUDC
when duplexing pick-up assembly door is closed, '1'.
Waste toner feeding screw lock detection switch
MS4
F73
F74
J1013A
-8
-7
WTBD
when waste toner clogging is detected, '1'.
Pre-photosensitive drum cleaner paper sensor
PS43
J353
-5
-4
-3
-2
-1
J1039
-1
-2
-3
-4
-5
LED
PS43D
+8V
CONNECT

Figure 3-112

Outputs from the DC Controller (1/10)


DC controller PCB
J1004
-2
SHUTOFF*
Main switch
SW1
Reactor (115V only)
DCP1 (main power supply PCB)
24V
J1031
-9
Power supply cooling fan
24V
FM8
24V
J1031
-10
FANERR
when FM8 on DCP1 is not rotating, '1'.
Left door SW
SW4
Delivery door SW
SW5
RL1
RL2
J704
-1
-2
-3
-4
-5
SSR1
J1012
-4
-5
-6
-7
-8
USSRD
UHON
LHON
LSSRD
See p. 3-165.
Power saving SW (See Note.)
SW10
THS2
H1
Upper fixing heater
J1020B
-8
-7
THM1
5V
THM1 (analog/input signal)
THS3
H2
Lower fixing heater
-6
-5
THM2
5V
THM2 (analog/input signal)
SSR2
THS5
H5
Upper cassette heater (CLC700 only)
THS6
H6
Lower cassette heater (CLC800 only)
Duplexing assembly door SW
SW9
THS4
H3
Duplexing stacking assembly heater (CLC800 only)
DCP2
DCP2 (options power supply PCB)
Lamp regulator
Drum heater controller PCB
THM3
H4
J1034 -1
-2
-3
DRHOFF
DRHERR

Note : The cassette heaters and drum heater remain on if SW10 is as indicated in the figure; when shifted down, it decomes synchronized with the main switch.

The heater in the duplexing unit stacking assembly always operates in conjunction with the main switch.

Figure 3-113

Outputs form the DC Controller (2/10)

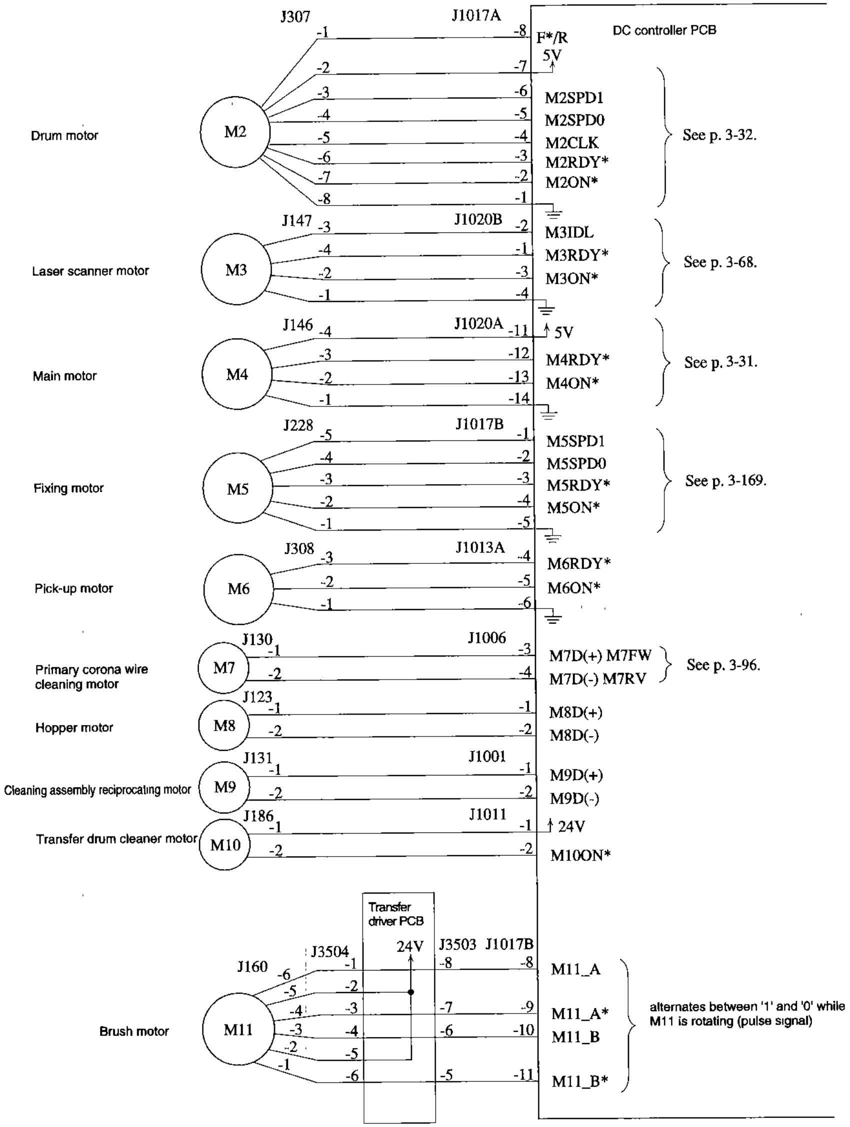

DC controller PCB
J307
J1017A
-1 -8 F*/R
5V
-2 -7
-3 -6 M2SPD1
-4 -5 M2SPD0
-5 -4 M2CLK
-6 -3 M2RDY*
-7 -2 M2ON*
-8 -1
See p. 3-32.
Drum motor
M2
J147
J1020B
-3 -2 M3IDL
-4 -1 M3RDY*
-2 -3 M3ON*
-1 -4
See p. 3-68.
Laser scanner motor
M3
J146
J1020A
-4 -11 5V
-3 -12 M4RDY*
-2 -13 M4ON*
-1 -14
See p. 3-31.
Main motor
M4
J228
J1017B
-5 -1 M5SPD1
-4 -2 M5SPD0
-3 -3 M5RDY*
-2 -4 M5ON*
-1 -5
See p. 3-169.
Fixing motor
M5
J308
J1013A
-3 -4 M6RDY*
-2 -5 M6ON*
-1 -6
Pick-up motor
M6
J130
J1006
-1 -3 M7D(+) M7FW
-2 -4 M7D(-) M7RV
See p. 3-96.
Primary corona wire cleaning motor
M7
J123
-1 -1 M8D(+)
-2 -2 M8D(-)
Hopper motor
M8
J131
J1001
-1 -1 M9D(+)
-2 -2 M9D(-)
Cleaning assembly reciprocating motor
M9
J186
J1011
-1 -1 24V
-2 -2 M10ON*
Transfer drum cleaner motor
M10
Transfer driver PCB
24V
J160
J3504
J3503
J1017B
-6 -1 -8 -8 M11_A
-5 -2
-4 -3 -7 -9 M11_A*
-3 -4 -6 -10 M11_B
-2 -5
-1 -6 -5 -11 M11_B*
alternates between '1' and '0' while M11 is rotating (pulse signal)
Brush motor
M11

Figure 3-114

Outputs from the DC Controller (3/10)

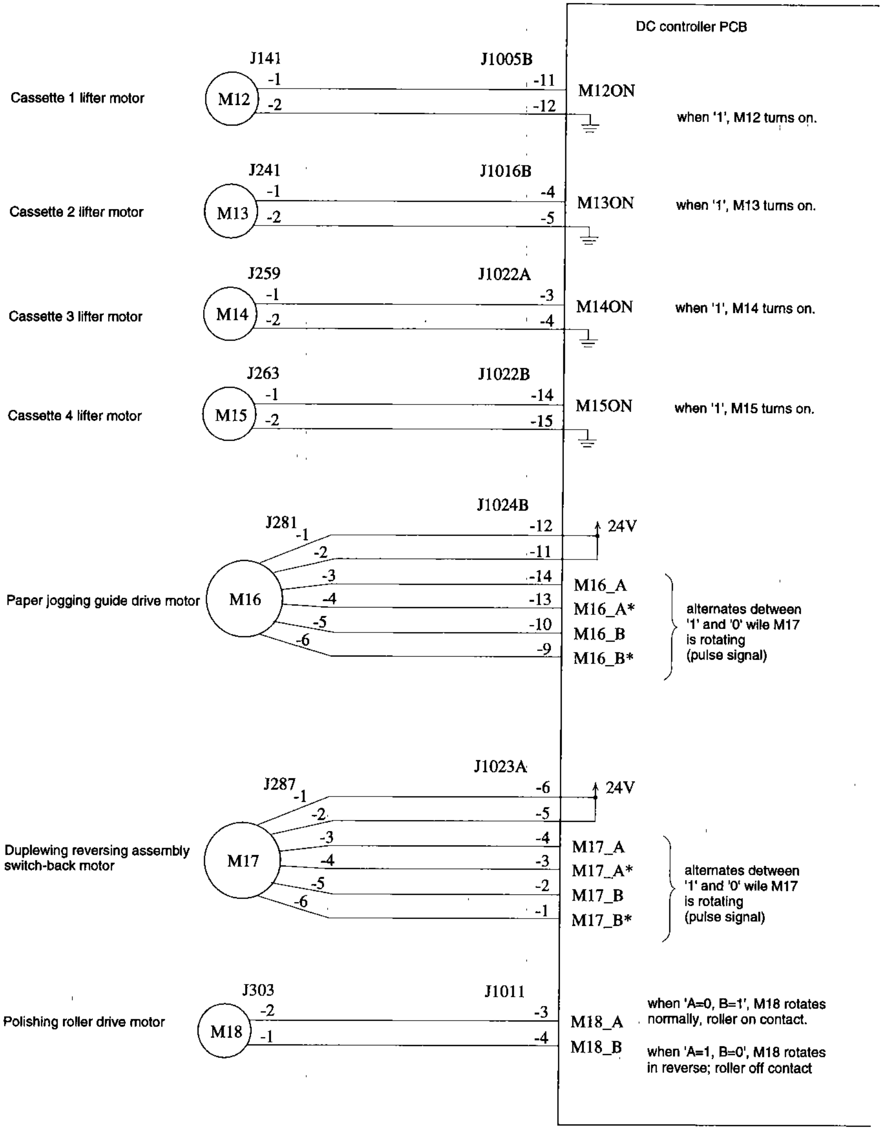

DC controller PCB
Cassette 1 lifter motor
M12
J141
-1
-2
J1005B
-11
-12
M12ON
when '1', M12 turns on.
Cassette 2 lifter motor
M13
J241
-1
-2
J1016B
-4
-5
M13ON
when '1', M13 turns on.
Cassette 3 lifter motor
M14
J259
-1
-2
J1022A
-3
-4
M14ON
when '1', M14 turns on.
Cassette 4 lifter motor
M15
J263
-1
-2
J1022B
-14
-15
M15ON
when '1', M15 turns on.
Paper jogging guide drive motor
M16
J281
-1
-2
-3
-4
-5
-6
J1024B
-12
-11
-14
-13
-10
-9
24V
M16_A
M16_A*
M16_B
M16_B*
alternates dertween '1' and '0' wile M17 is rotating (pulse signal)
Duplewing reversing assembly switch-back motor
M17
J287
-1
-2
-3
-4
-5
-6
J1023A
-6
-5
-4
-3
-2
-1
24V
M17_A
M17_A*
M17_B
M17_B*
alternates dertween '1' and '0' wile M17 is rotating (pulse signal)
Polishing roller drive motor
M18
J303
-2
-1
J1011
-3
-4
M18_A
M18_B
when 'A=0, B=1', M18 rotates normally, roller on contact.
when 'A=1, B=0', M18 rotates in reverse; roller off contact

Figure 3-115

Outputs from the DC Controller (4/10. TYPE1)

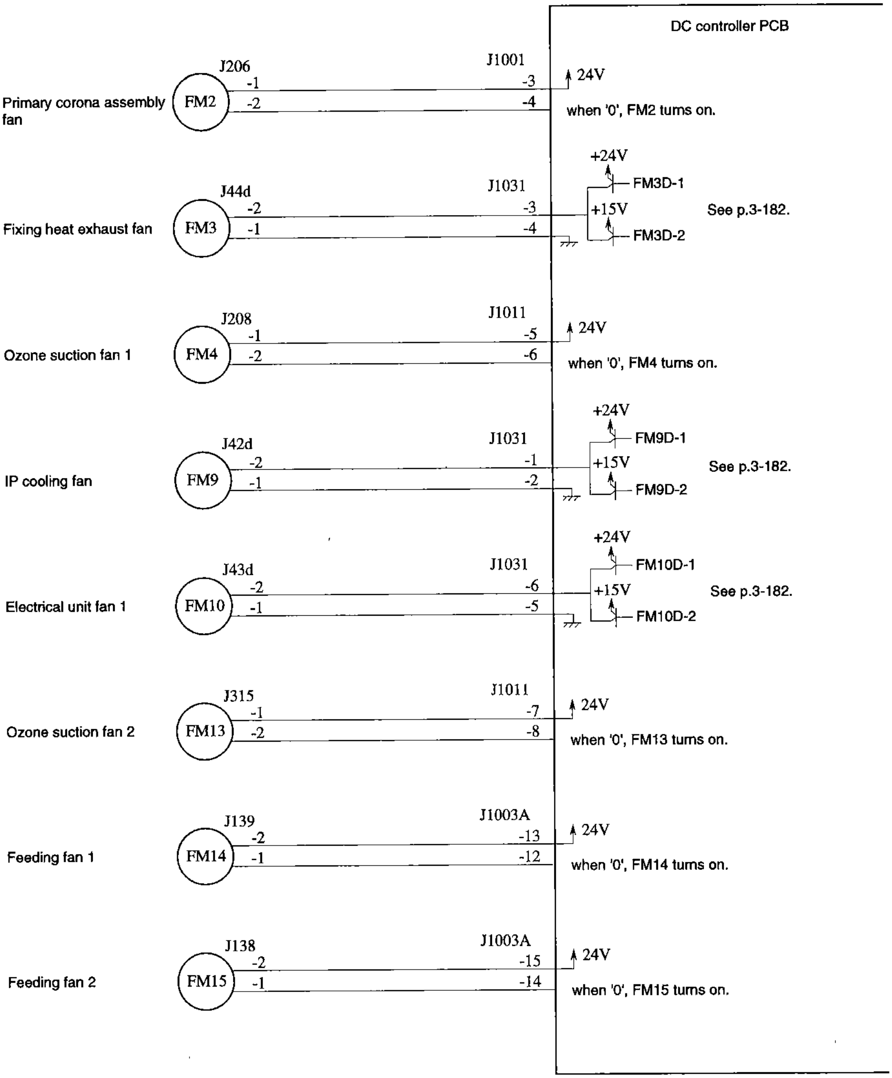
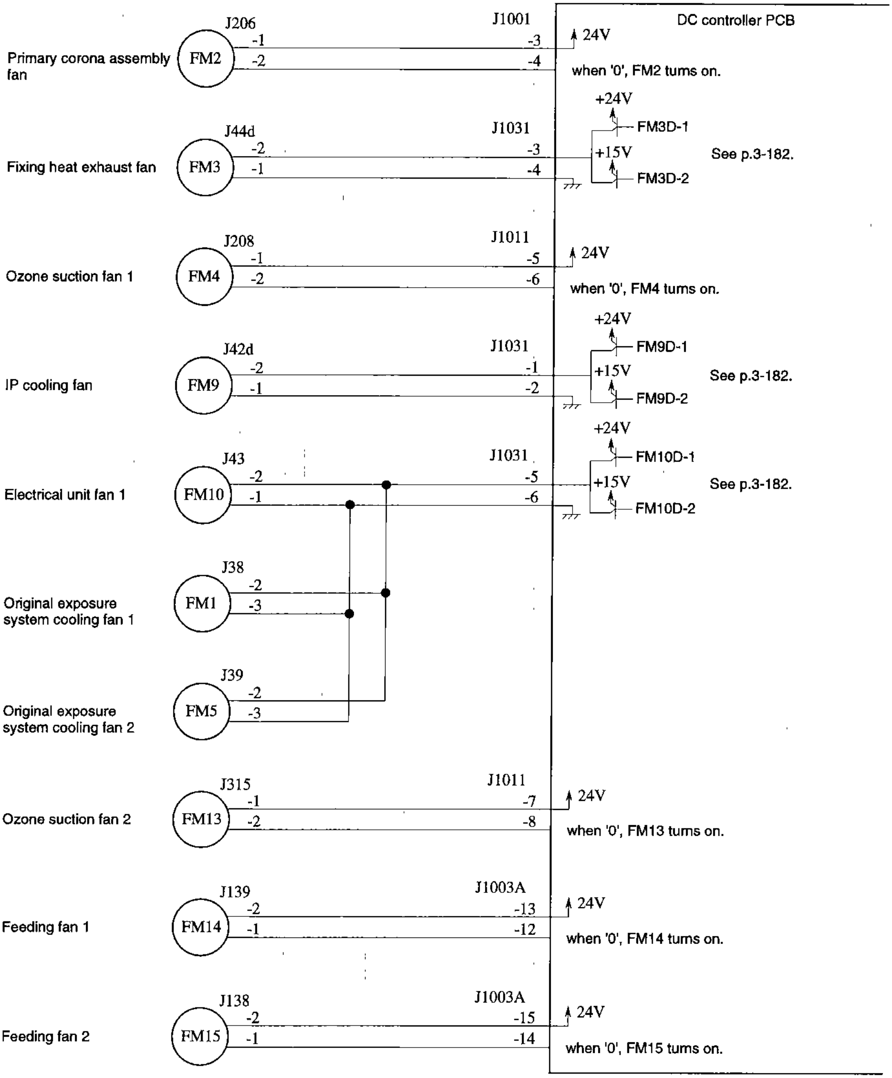

DC controller PCB
Primary corona assembly fan
FM2
J206
-1
-2
J1001
-3
-4
24V
when '0', FM2 turns on.
Fixing heat exhaust fan
FM3
J44d
-2
-1
J1031
-3
-4
+24V
FM3D-1
+15V
FM3D-2
See p.3-182.
Ozone suction fan 1
FM4
J208
-1
-2
J1011
-5
-6
24V
when '0', FM4 turns on.
IP cooling fan
FM9
J42d
-2
-1
J1031
-1
-2
+24V
FM9D-1
+15V
FM9D-2
See p.3-182.
Electrical unit fan 1
FM10
J43d
-2
-1
J1031
-6
-5
+24V
FM10D-1
+15V
FM10D-2
See p.3-182.
Ozone suction fan 2
FM13
J315
-1
-2
J1011
-7
-8
24V
when '0', FM13 turns on.
Feeding fan 1
FM14
J139
-2
-1
J1003A
-13
-12
24V
when '0', FM14 turns on.
Feeding fan 2
FM15
J138
-2
-1
J1003A
-15
-14
24V
when '0', FM15 turns on.

Figure 3-116A

Outputs from the DC Controller (4/10. TYPE2)


DC controller PCB
Primary corona assembly fan
FM2
J206
-1
-2
J1001
-3
-4
24V
when '0', FM2 turns on.
Fixing heat exhaust fan
FM3
J44d
-2
-1
J1031
-3
-4
+24V
FM3D-1
+15V
FM3D-2
See p.3-182.
Ozone suction fan 1
FM4
J208
-1
-2
J1011
-5
-6
24V
when '0', FM4 turns on.
IP cooling fan
FM9
J42d
-2
-1
J1031
-1
-2
+24V
FM9D-1
+15V
FM9D-2
See p.3-182.
Electrical unit fan 1
FM10
J43
-2
-1
J1031
-5
-6
+24V
FM10D-1
+15V
FM10D-2
See p.3-182.
Original exposure system cooling fan 1
FM1
J38
-2
-3
Original exposure system cooling fan 2
FM5
J39
-2
-3
Ozone suction fan 2
FM13
J315
-1
-2
J1011
-7
-8
24V
when '0', FM13 turns on.
Feeding fan 1
FM14
J139
-2
-1
J1003A
-13
-12
24V
when '0', FM14 turns on.
Feeding fan 2
FM15
J138
-2
-1
J1003A
-15
-14
24V
when '0', FM15 turns on.

For FM8, see Figure 3-113.
For FM12, see Figure 3-122.

Figure 3-116B

Outputs from the DC Controller (5/10)

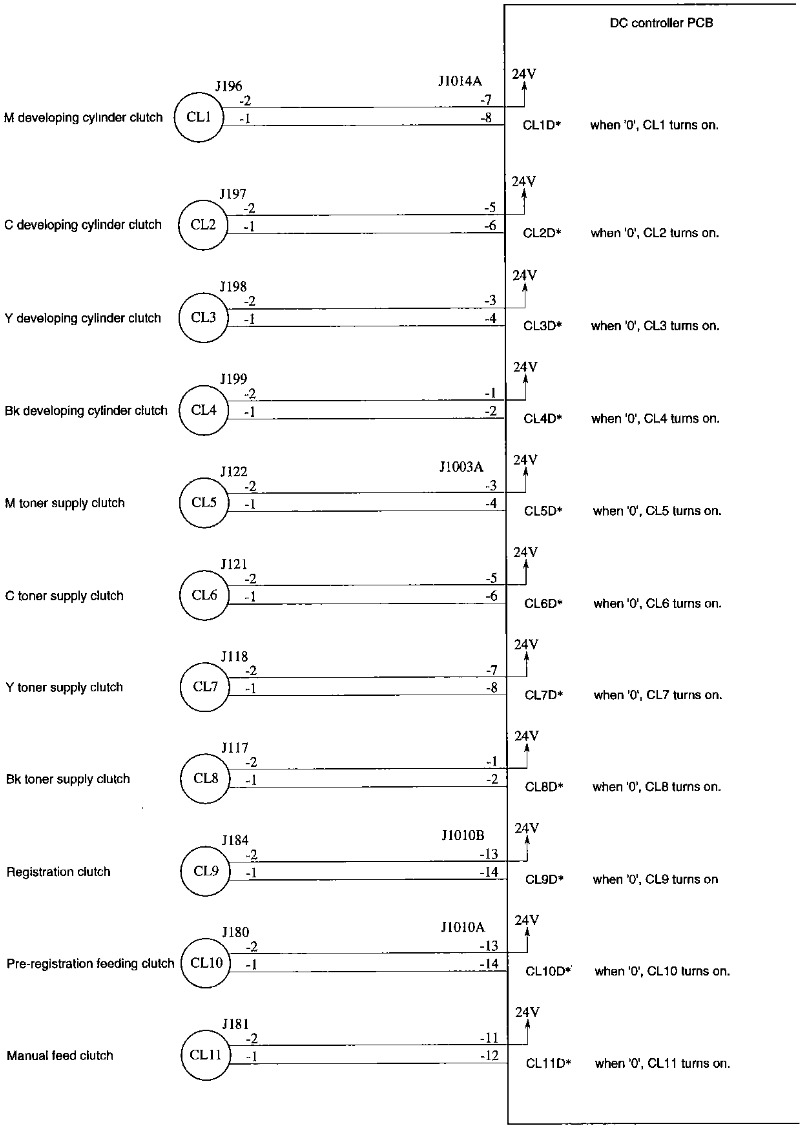

DC controller PCB
M developing cylinder clutch
CL1
J196
-2
-1
J1014A
-7
-8
24V
CL1D*
when '0', CL1 turns on.
C developing cylinder clutch
CL2
J197
-2
-1
-5
-6
24V
CL2D*
when '0', CL2 turns on.
Y developing cylinder clutch
CL3
J198
-2
-1
-3
-4
24V
CL3D*
when '0', CL3 turns on.
Bk developing cylinder clutch
CL4
J199
-2
-1
-1
-2
24V
CL4D*
when '0', CL4 turns on.
M toner supply clutch
CL5
J122
-2
-1
J1003A
-3
-4
24V
CL5D*
when '0', CL5 turns on.
C toner supply clutch
CL6
J121
-2
-1
-5
-6
24V
CL6D*
when '0', CL6 turns on.
Y toner supply clutch
CL7
J118
-2
-1
-7
-8
24V
CL7D*
when '0', CL7 turns on.
Bk toner supply clutch
CL8
J117
-2
-1
-1
-2
24V
CL8D*
when '0', CL8 turns on.
Registration clutch
CL9
J184
-2
-1
J1010B
-13
-14
24V
CL9D*
when '0', CL9 turns on
Pre-registration feeding clutch
CL10
J180
-2
-1
J1010A
-13
-14
24V
CL10D*
when '0', CL10 turns on.
Manual feed clutch
CL11
J181
-2
-1
-11
-12
24V
CL11D*
when '0', CL11 turns on.

Figure 3-117

Outputs from the DC Controller (6/10)

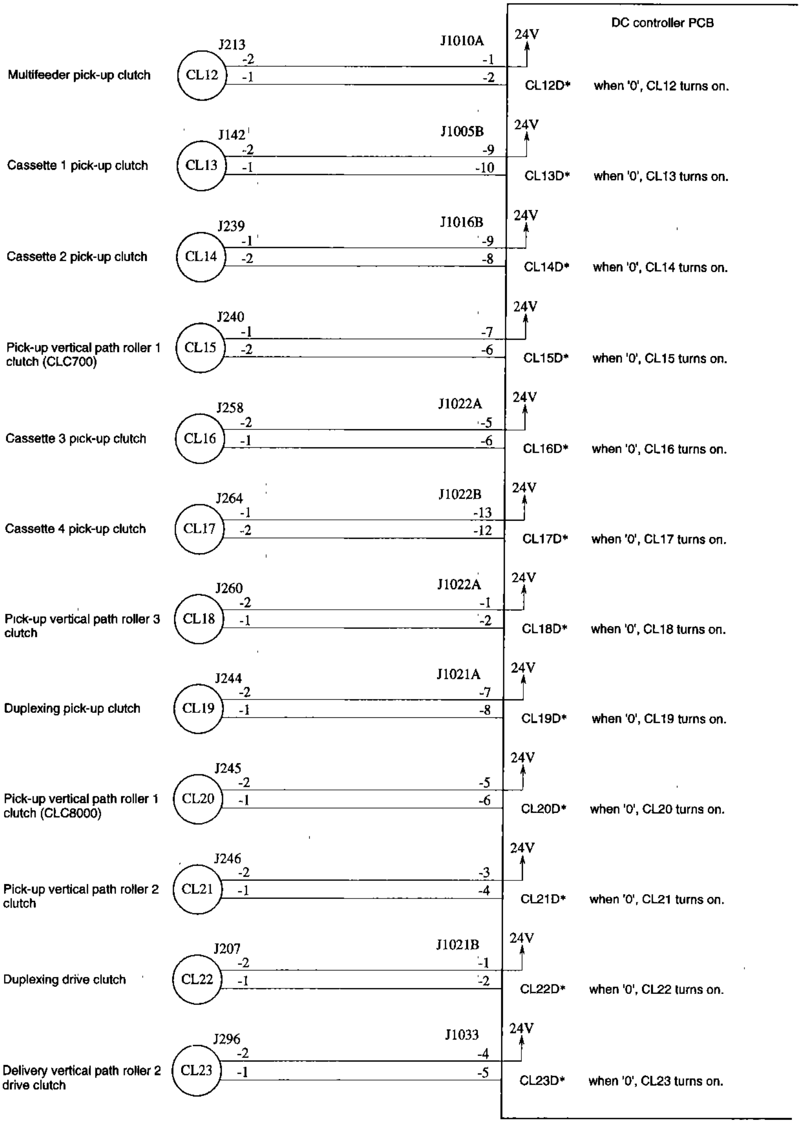

DC controller PCB
Multifeeder pick-up clutch
CL12
J213
-2
-1
J1010A
-1
-2
24V
CL12D*
when '0', CL12 turns on.
Cassette 1 pick-up clutch
CL13
J142
-2
-1
J1005B
-9
-10
24V
CL13D*
when '0', CL13 turns on.
Cassette 2 pick-up clutch
CL14
J239
-1
-2
J1016B
-9
-8
24V
CL14D*
when '0', CL14 turns on.
Pick-up vertical path roller 1 clutch (CLC700)
CL15
J240
-1
-2
-7
-6
24V
CL15D*
when '0', CL15 turns on.
Cassette 3 pick-up clutch
CL16
J258
-2
-1
J1022A
-5
-6
24V
CL16D*
when '0', CL16 turns on.
Cassette 4 pick-up clutch
CL17
J264
-1
-2
J1022B
-13
-12
24V
CL17D*
when '0', CL17 turns on.
Pick-up vertical path roller 3 clutch
CL18
J260
-2
-1
J1022A
-1
-2
24V
CL18D*
when '0', CL18 turns on.
Duplexing pick-up clutch
CL19
J244
-2
-1
J1021A
-7
-8
24V
CL19D*
when '0', CL19 turns on.
Pick-up vertical path roller 1 clutch (CLC8000)
CL20
J245
-2
-1
-5
-6
24V
CL20D*
when '0', CL20 turns on.
Pick-up vertical path roller 2 clutch
CL21
J246
-2
-1
-3
-4
24V
CL21D*
when '0', CL21 turns on.
Duplexing drive clutch
CL22
J207
-2
-1
J1021B
-1
-2
24V
CL22D*
when '0', CL22 turns on.
Delivery vertical path roller 2 drive clutch
CL23
J296
-2
-1
J1033
-4
-5
24V
CL23D*
when '0', CL23 turns on.

Figure 3-118

Outputs from the DC Controller (7/10)

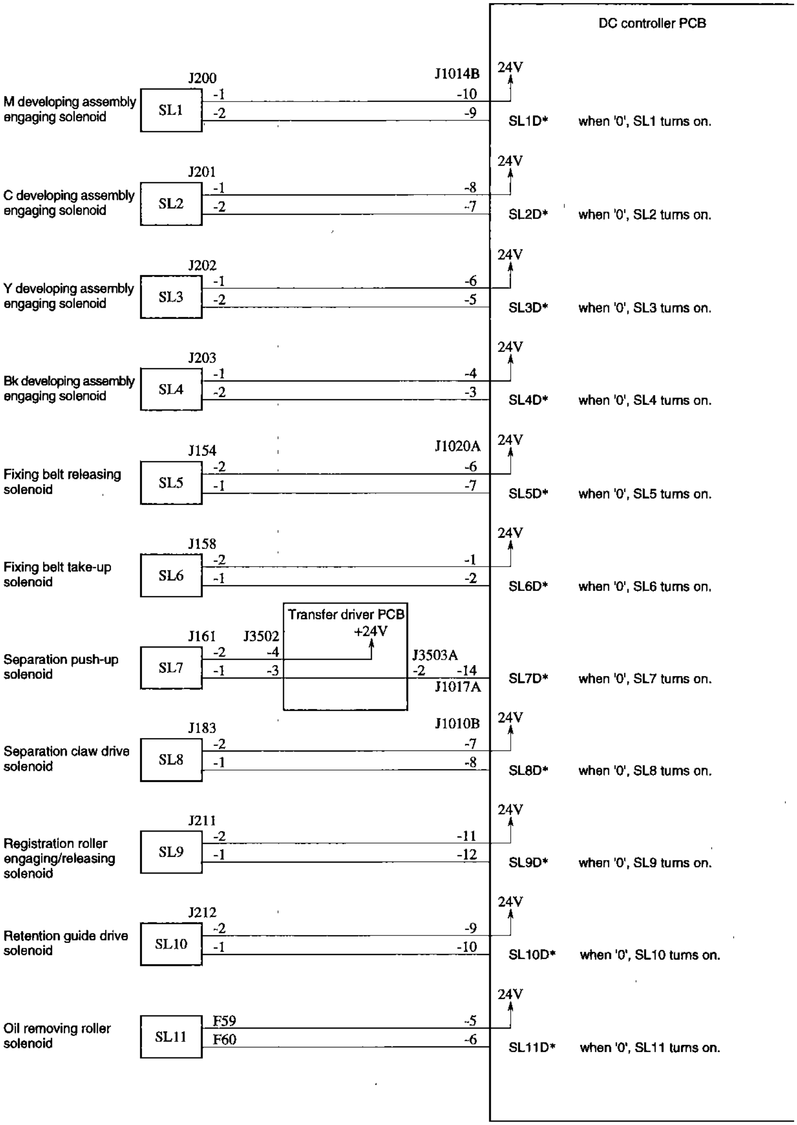

DC controller PCB
M developing assembly engaging solenoid
SL1
J200
-1
-2
J1014B
-10
-9
24V
SL1D*
when '0', SL1 turns on.
C developing assembly engaging solenoid
SL2
J201
-1
-2
-8
-7
24V
SL2D*
when '0', SL2 turns on.
Y developing assembly engaging solenoid
SL3
J202
-1
-2
-6
-5
24V
SL3D*
when '0', SL3 turns on.
Bk developing assembly engaging solenoid
SL4
J203
-1
-2
-4
-3
24V
SL4D*
when '0', SL4 turns on.
Fixing belt releasing solenoid
SL5
J154
-2
-1
J1020A
-6
-7
24V
SL5D*
when '0', SL5 turns on.
Fixing belt take-up solenoid
SL6
J158
-2
-1
-1
-2
24V
SL6D*
when '0', SL6 turns on.
Transfer driver PCB
+24V
Separation push-up solenoid
SL7
J161
-2
-1
J3502
-4
-3
J3503A
-2
-14
J1017A
SL7D*
when '0', SL7 turns on.
Separation claw drive solenoid
SL8
J183
-2
-1
J1010B
-7
-8
24V
SL8D*
when '0', SL8 turns on.
Registration roller engaging/releasing solenoid
SL9
J211
-2
-1
-11
-12
24V
SL9D*
when '0', SL9 turns on.
Retention guide drive solenoid
SL10
J212
-2
-1
-9
-10
24V
SL10D*
when '0', SL10 turns on.
Oil removing roller solenoid
SL11
F59
F60
-5
-6
24V
SL11D*
when '0', SL11 turns on.

Figure 3-119

Outputs from the DC Controller (8/10)

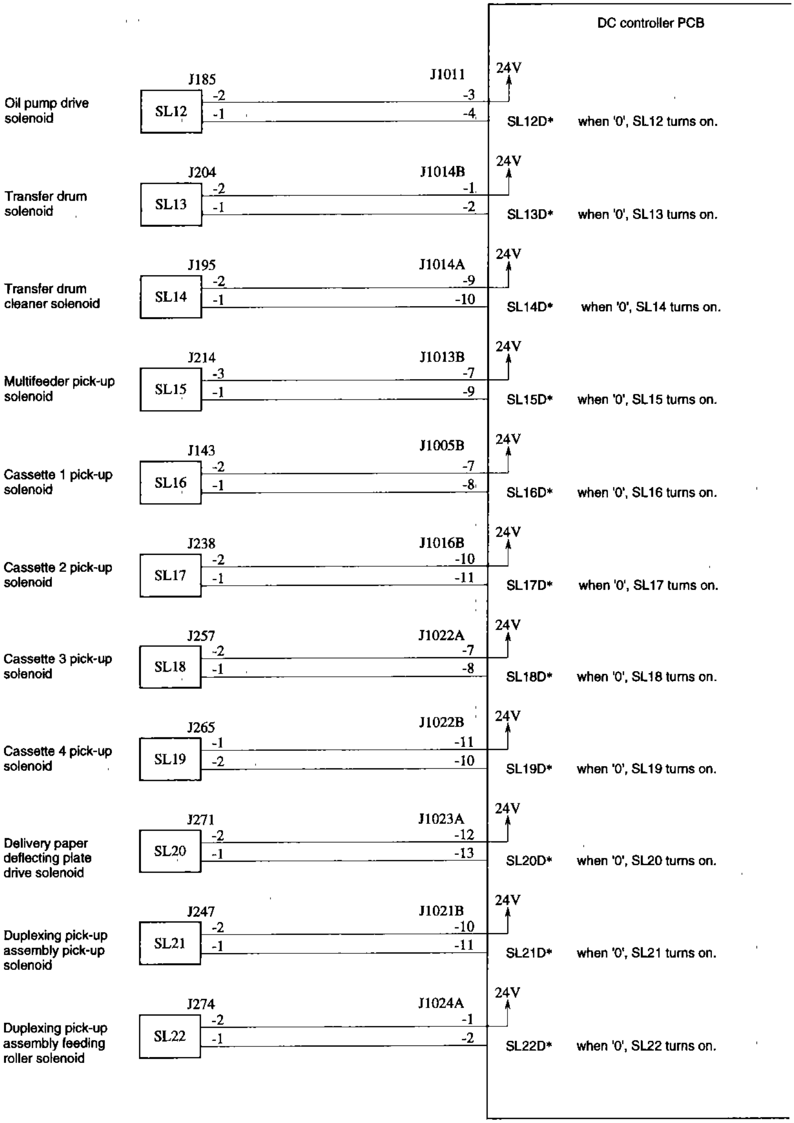

DC controller PCB
Oil pump drive solenoid
SL12
J185
-2
-1
J1011
-3
-4
24V
SL12D*
when '0', SL12 turns on.
Transfer drum solenoid
SL13
J204
-2
-1
J1014B
-1
-2
24V
SL13D*
when '0', SL13 turns on.
Transfer drum cleaner solenoid
SL14
J195
-2
-1
J1014A
-9
-10
24V
SL14D*
when '0', SL14 turns on.
Multifeeder pick-up solenoid
SL15
J214
-3
-1
J1013B
-7
-9
24V
SL15D*
when '0', SL15 turns on.
Cassette 1 pick-up solenoid
SL16
J143
-2
-1
J1005B
-7
-8
24V
SL16D*
when '0', SL16 turns on.
Cassette 2 pick-up solenoid
SL17
J238
-2
-1
J1016B
-10
-11
24V
SL17D*
when '0', SL17 turns on.
Cassette 3 pick-up solenoid
SL18
J257
-2
-1
J1022A
-7
-8
24V
SL18D*
when '0', SL18 turns on.
Cassette 4 pick-up solenoid
SL19
J265
-1
-2
J1022B
-11
-10
24V
SL19D*
when '0', SL19 turns on.
Delivery paper deflecting plate drive solenoid
SL20
J271
-2
-1
J1023A
-12
-13
24V
SL20D*
when '0', SL20 turns on.
Duplexing pick-up assembly pick-up solenoid
SL21
J247
-2
-1
J1021B
-10
-11
24V
SL21D*
when '0', SL21 turns on.
Duplexing pick-up assembly feeding roller solenoid
SL22
J274
-2
-1
J1024A
-1
-2
24V
SL22D*
when '0', SL22 turns on.

Figure 3-120

Outputs from the DC Controller (9/10)

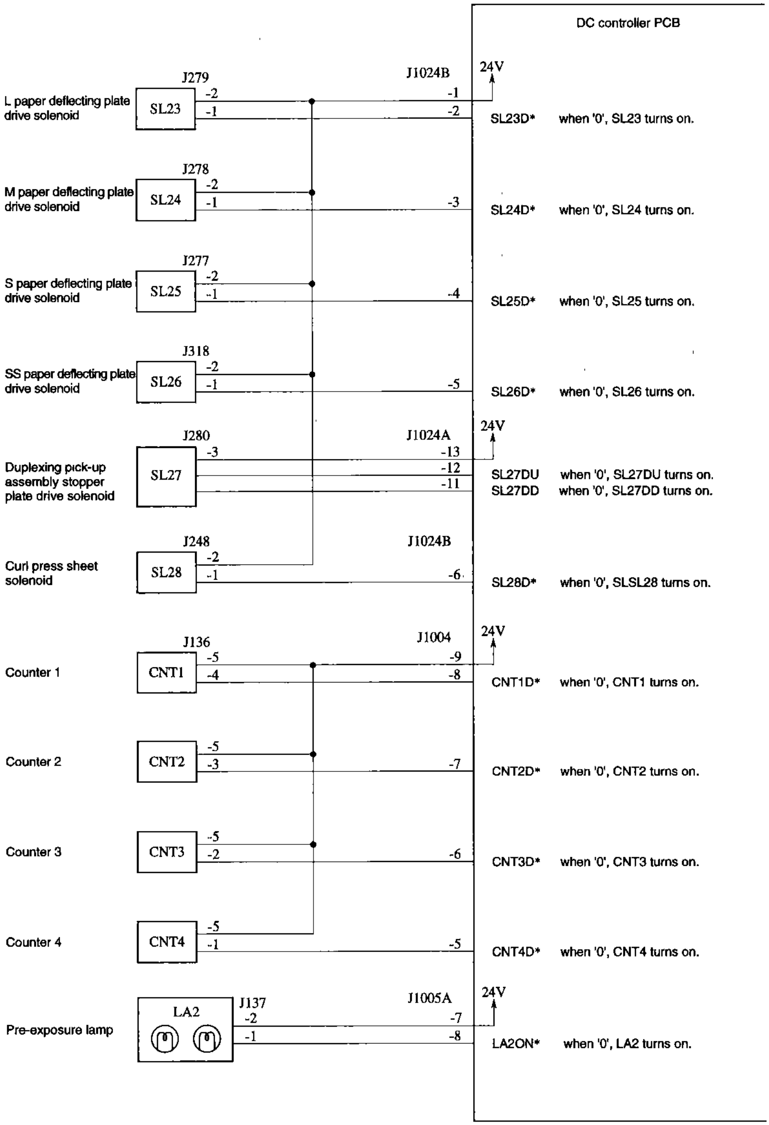

DC controller PCB
L paper deflecting plate drive solenoid
J279
SL23
-2
-1
J1024B
-1
-2
24V
SL23D*
when '0', SL23 turns on.
M paper deflecting plate drive solenoid
J278
SL24
-2
-1
-3
SL24D*
when '0', SL24 turns on.
S paper deflecting plate drive solenoid
J277
SL25
-2
-1
-4
SL25D*
when '0', SL25 turns on.
SS paper deflecting plate drive solenoid
J318
SL26
-2
-1
-5
SL26D*
when '0', SL26 turns on.
Duplexing pick-up assembly stopper plate drive solenoid
J280
SL27
-3
J1024A
-13
-12
-11
24V
SL27DU
when '0', SL27DU turns on.
SL27DD
when '0', SL27DD turns on.
Curl press sheet solenoid
J248
SL28
-2
-1
J1024B
-6
SL28D*
when '0', SLSL28 turns on.
Counter 1
J136
CNT1
-5
-4
J1004
-9
-8
24V
CNT1D*
when '0', CNT1 turns on.
Counter 2
CNT2
-5
-3
-7
CNT2D*
when '0', CNT2 turns on.
Counter 3
CNT3
-5
-2
-6
CNT3D*
when '0', CNT3 turns on.
Counter 4
CNT4
-5
-1
-5
CNT4D*
when '0', CNT4 turns on.
Pre-exposure lamp
LA2
J137
-2
-1
J1005A
-7
-8
24V
LA2ON*
when '0', LA2 turns on.

Figure 3-121

Outputs from the DC Controller (10/10)

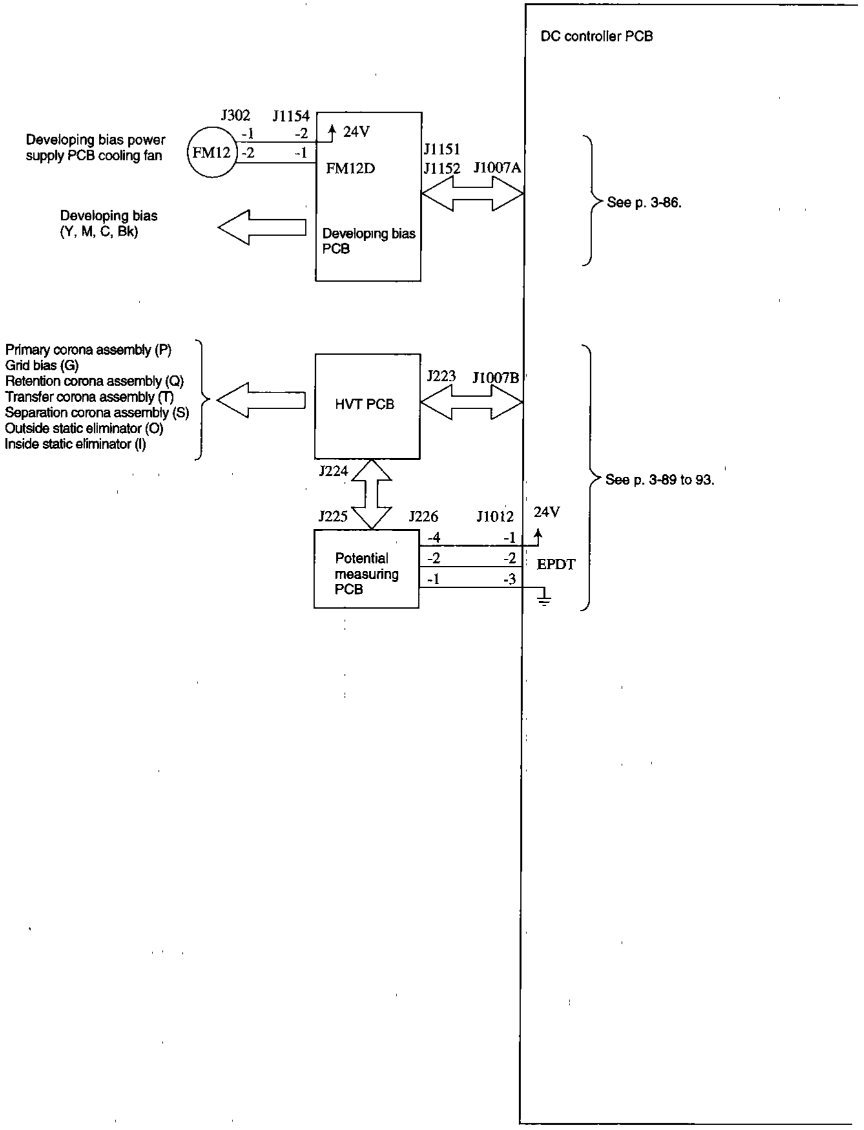

DC controller PCB
Developing bias power supply PCB cooling fan
J302
J1154
-1
-2
-2
-1
FM12
24V
FM12D
J1151
J1152
J1007A
Developing bias (Y, M, C, Bk)
Developing bias PCB
See p. 3-86.
Primary corona assembly (P)
Grid bias (G)
Retention corona assembly (Q)
Transfer corona assembly (T)
Separation corona assembly (S)
Outside static eliminator (O)
Inside static eliminator (I)
HVT PCB
J223
J1007B
J224
J225
J226
J1012
24V
See p. 3-89 to 93.
-4
-1
-2
-2
-1
-3
Potential measuring PCB
EPDT

Figure 3-122

D. Basic Sequence of Operations

1. Sequence at Power-On

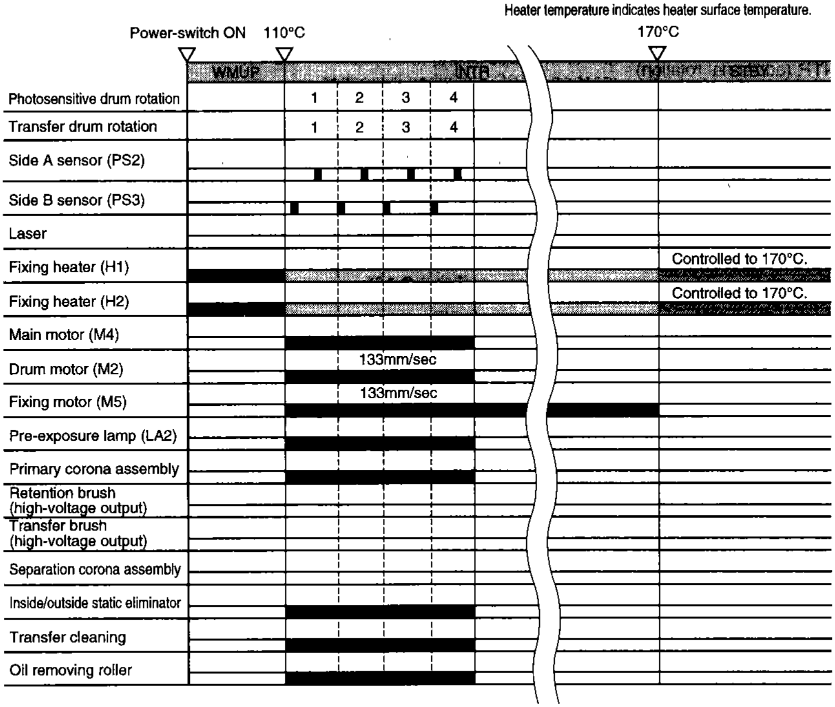


Figure 3-123 Sequence at Power-On

a. The copying operations are based on the side A sensor and the side B sensor used to detect the position of the transfer drum. For control executed based on other signals, see the respective timing charts.
b. The outside diameter of the transfer drum is the same as that of the photosensitive drum, and both drums come into contact with each other as necessary (copying) the photosensitive drum makes a single rotation for each rotation of the transfer drum.
c. The fixing temperature indicates the surface temperature of the fixing roller, i.e., the value indicated under ANALOG of DISPLAY in service mode (temperature detected by a thermistor).

Period		Description	Remarks
WMUP (warm-up)	Between when the power switch has been turned on and when the surface temperature of the upper fixing roller reaches 110°C.	Waits from the fixing roller to warm up.	
INTR (additional rotation)	Between when the surface temperature of the upper fixing roller has reached 110°C and when it reaches 160°C.		
STBY (standby)	Between when INTR is over and when the Copy Start key is pressed or the Power switch is turned off.	Waits for a press on the Copy Start key or any other operation key.	

Table 3-101

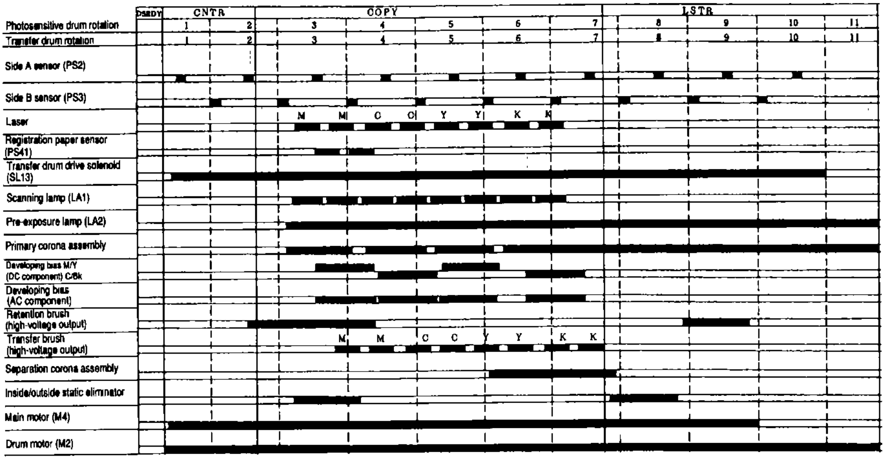


Figure 3-124 (A4/LTR, 2 copies, DIRECT, cassette 1)

Period		Description	Remarks
DSRDY (scanner ready)	Between when the Copy Start key has been pressed and when the transfer drum starts to rotate.	Executes a document detection scan. Executes shading correction.	
CNTR (control rotation)	Between when the DSRDY is over and when attraction of copy paper starts.	Measures and controls the surface potential of the drum.	
COPY (copy)	Between when the transfer drum starts to attract copy paper and when all toner has been trasferred to the copy paper.	Turns on and off the laser beam based on the video signals, develops specified colors, and transfers.	
LSTR (post rotation)	Between when COPY ends and when the drum motor stops.	Discharges copy paper. Stabilizes the sensitivity of the photosensitive drum. Discharges the transfer drum (cleaning).	

Table 3-102

E. Generating the Image Leading Edge Signal

1. Outline

The copier controls sequences of copying operations with reference to the leading edge of copy paper on the transfer drum.

Figure 3-125 shows the position of copy paper at the time the image leading edge signal is generated within the transfer drum.

The distance between the point of laser exposure and the point of transfer on the photosensitive drum (a) and the leading edge of copy paper and the point of transfer on the transfer drum (b) are equal.

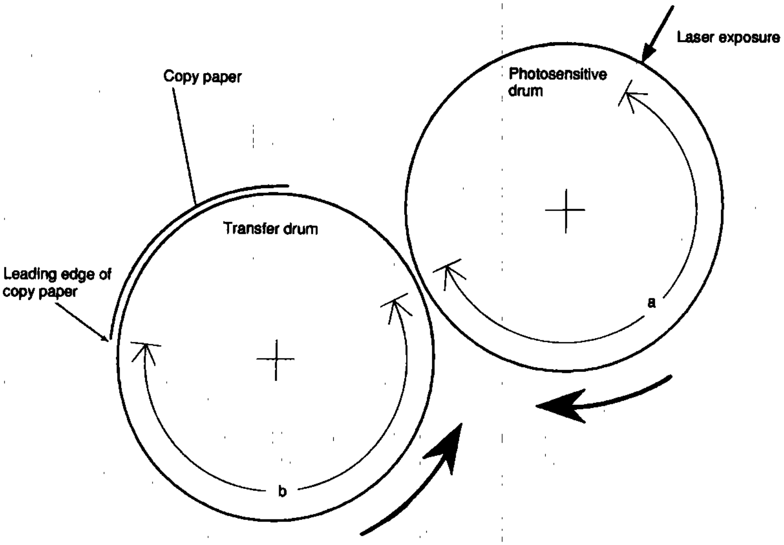

Laser exposure
Photosensitive drum
Copy paper
Transfer drum
Leading edge of copy paper
a
b

Figure 3-125

2. Controlling Side A and Side B

The copier must deposit a maximum of four different colors (toner) on the same spot; to ensure correct deposits of toner, it controls the original exposure, image processing, laser exposure, high voltage, and feeding sequences with reference to the leading edge of copy paper.

A maximum of two sheets of copy paper are retained on the transfer drum at the same time, and the sensor (PS2, side A sensor; PS3, side B sensor) inside the transfer drum unit and the two signal plates that operate in connection with the transfer drum are used to generate the image leading edge signal (ITOP-A, ITOP-B) for each sheet of copy paper.

- Transfer Drum When Copying on Side A

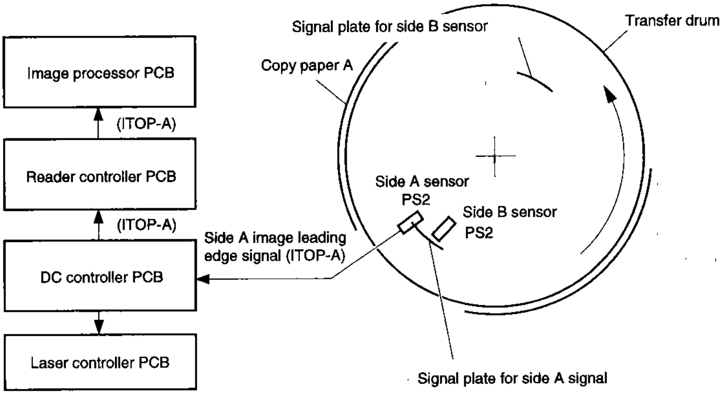


Image processor PCB
(ITOP-A)
Reader controller PCB
(ITOP-A)
DC controller PCB
Laser controller PCB
Signal plate for side B sensor
Copy paper A
Transfer drum
Side A sensor
PS2
Side B sensor
PS2
Side A image leading edge signal (ITOP-A)
Signal plate for side A signal

- Transfer Drum When Copying on Side B

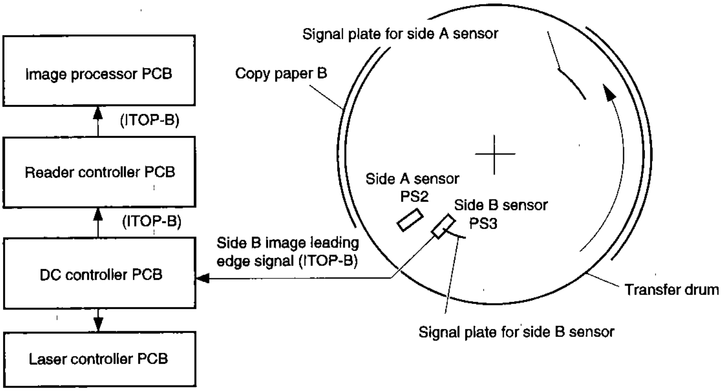


Image processor PCB
(ITOP-B)
Reader controller PCB
(ITOP-B)
DC controller PCB
Laser controller PCB
Signal plate for side A sensor
Copy paper B
Side A sensor
PS2
Side B sensor
PS3
Side B image leading edge signal (ITOP-B)
Transfer drum
Signal plate for side B sensor

Figure 3-126

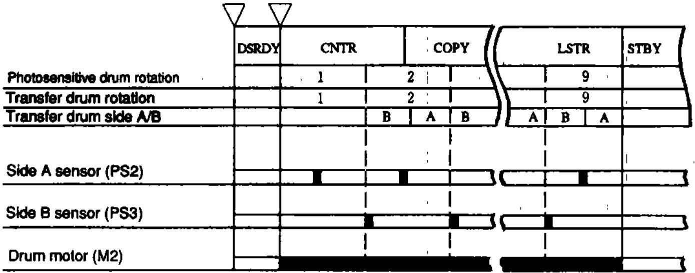

DSRDY
CNTR
COPY
LSTR
STBY
Photosensitive drum rotation
Transfer drum rotation
Transfer drum side A/B
1
2
9
1
2
9
B
A
B
A
B
A
Side A sensor (PS2)
Side B sensor (PS3)
Drum motor (M2)

Figure 3-127

Figure 3-128 shows the way copy paper is retained on the transfer drum in each copy mode. In mono color mode, paper is retained in the same way as M for C, Y, and Bk.

Small size paper ....216 mm or less in feeding direction (A4/LTR or less)
Large size ....217 mm or more in feeding direction
2/M ....2, second sheet of paper; M, M-color development

- In the table, the small and large sizes do not necessarily represent the size notations used in relation to the cassettes.
- When copies are made on small-size paper without potential measurement, CNTR ends earlier* and copying starts on side B.

*Equivalent of a 0.5 rotation in relation to the transfer drum.

CNTR end ▽

Transfer drum rotation	2	3	4	5	6	7	8	9	10	11	12	13	14
Copy paper leading edge	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA

Mono (M)	Small (5 sheets)	1/M 2/M	3/M 4/M	5/M										
	Large (3 sheets)	1/M	2/M	3/M										
3-color (MCY)	Small (5 sheets)	1/M 2/M	1/C 2/C	1/Y 2/Y	3/M 4/M	3/C 4/C	3/Y 4/Y	5/M	5/C	5/Y				
	Large (3 sheets)	1/M	1/C	1/Y	2/M	2/C	2/Y	3/M	3/C	3/Y				
4-color (MCYBk)	Small (5 sheets)	1/M 2/M	1/C 2/C	1/Y 2/Y	1/Bk 2/Bk	3/M 4/M	3/C 4/C	3/Y 4/Y	3/Bk 4/Bk	5/M	5/C	5/Y	5/Bk	
	Large (3 sheets)	1/M	1/C	1/Y	1/Bk	2/M	2/C	2/Y	2/Bk	3/M	3/C	3/Y	3/Bk	

Figure 3-128

F. Main Motor

The main motor (M4) is a brushlesss DC motor equipped with a built-in rotation speed control circuit. It rotates at a specific speed when the DC controller PCB causes the main motor drive signal (M4ON*) to go '0'.

If the rotation speed of the motor deviates for some reason, the motor causes the main motor ready signal (M4RDY*) to go '1', and the DC controller PCB indicates 'E010' on the control panel.

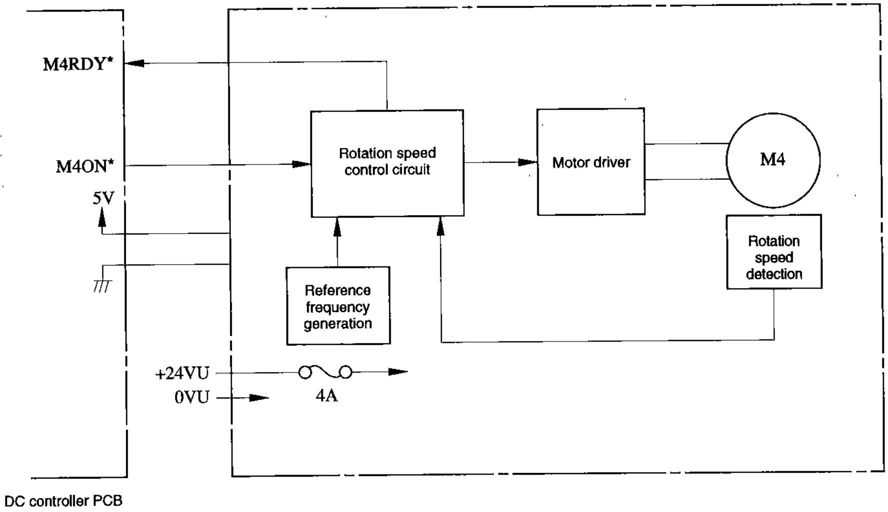

M4RDY*
M4ON*
5V
+24VU
0VU
4A
Rotation speed control circuit
Motor driver
M4
Rotation speed detection
Reference frequency generation
DC controller PCB

Figure 3-129

G. Drum Motor

The transfer drum motor (M2) is a brushless DC motor equipped with a rotation speed control circuit. It rotates at a specific speed when the DC controller PCB causes the drum motor drive signal (M2ON*) to go '0'.

The drum motor is controlled to four different speeds according to two speed control signals (M2SPD0, M2SPD1) generated by the DC controller PCB.

The DC controller PCB monitors the rotation detection signal (M2CLK) while the drum motor is rotating; if the speed deviates for some reason, the motor causes the drum motor ready signal (M2RDY) to go '1', and the DC controller PCB indicates 'E012' on the control panel.

Reference:

The copier controls the fixing speed in four stages to ensure proper fixing when making two-sided copies and using thick paper or transparencies. In addition, since the feeding path between the transfer drum and fixing unit is short, the drum motor must also be controlled to four speeds according to the fixing speeds. (See p. 3-169.)

	M2SPD0	M2SPD1
Normal	0	0
Duplexing	0	1
Thick paper	1	0
Transparency	1	1

Table 3-103

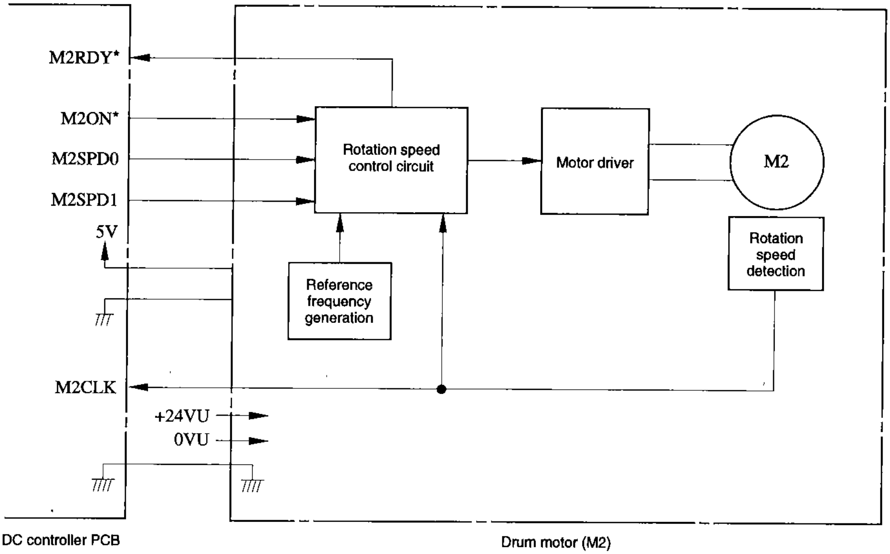

M2RDY*
M2ON*
M2SPD0
M2SPD1
5V
M2CLK
+24VU
0VU
Rotation speed control circuit
Reference frequency generation
Motor driver
M2
Rotation speed detection
DC controller PCB
Drum motor (M2)

Figure 3-130

II. ORIGINAL EXPOSURE SYSTEM

A. Outline

The original exposure system refers to the functions involving those processes executed between when an original is exposed and when the reflected light is directed to the CCD. See Figure 3-201 for a cross section of the original exposure system and Figure 3-202 for its external view.

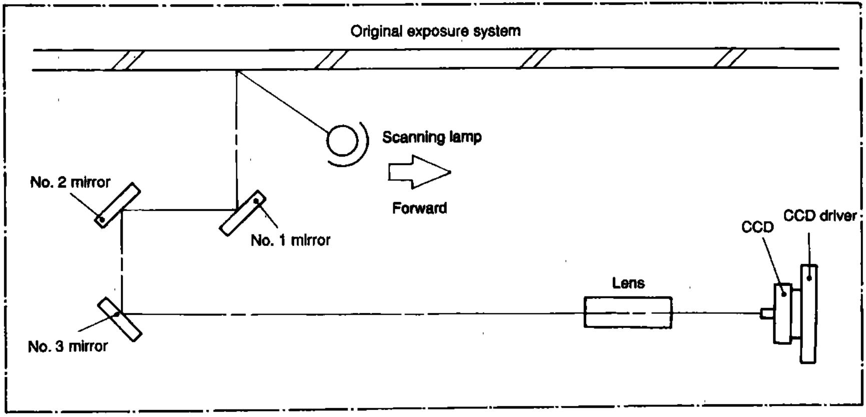

Original exposure system
Scanning lamp
Forward
No. 2 mirror
No. 1 mirror
No. 3 mirror
CCD
CCD driver
Lens

Figure 3-201

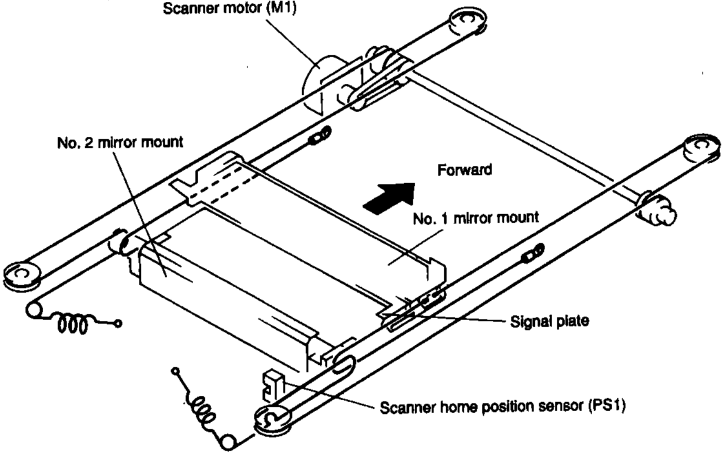
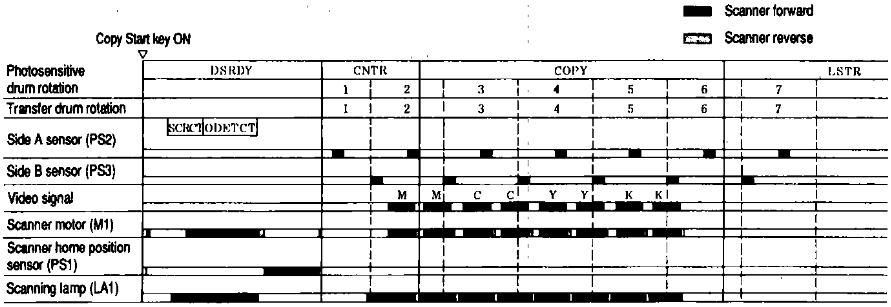

Scanner motor (M1)
No. 2 mirror mount
Forward
No. 1 mirror mount
Signal plate
Scanner home position sensor (PS1)

Figure 3-202

B. Basic Sequence of Exposing Originals

1. Sequence


Scanner forward
Scanner reverse
Copy Start key ON
Photosensitive drum rotation
Transfer drum rotation
Side A sensor (PS2)
Side B sensor (PS3)
Video signal
Scanner motor (M1)
Scanner home position sensor (PS1)
Scanning lamp (LA1)
DSRDY
CNTR
COPY
LSTR
1 2 3 4 5 6 7
1 2 3 4 5 6 7
SCRCT
ODETCT
M M C C Y Y K K

SCRCT: Measures the shading correction position.
ODETCT: Identifies the document position, black original, and executes AE measurement.

Figure 3-203 (A4/LTR, 2 copies, 4 colors, DIRECT, cassette 1)

2. Scanner Home Position Sensor and Operation

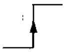
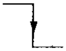
	Scanner Motor		Description
	Forward	Reverse	
Scanner home position sensor (PS1: SCHP)			Switches to forward.
			Moves forward by 1 mm, and stops; the point is used as the home position.

Table 3-201

The scanner home position sensor turns on only for the following conditions:

- at the start of copying operation.
- when all scans for the specified number of copies have been completed.
- during CCD adjustment.

The sensor does not turn on during continuous copying. Should it turn on because of an error, the ongoing original scan is stopped immediately. Figure 3-204 shows the movement of the scanner during copying operation; the start position is about 5 mm in the forward direction from the home position (DIRECT).

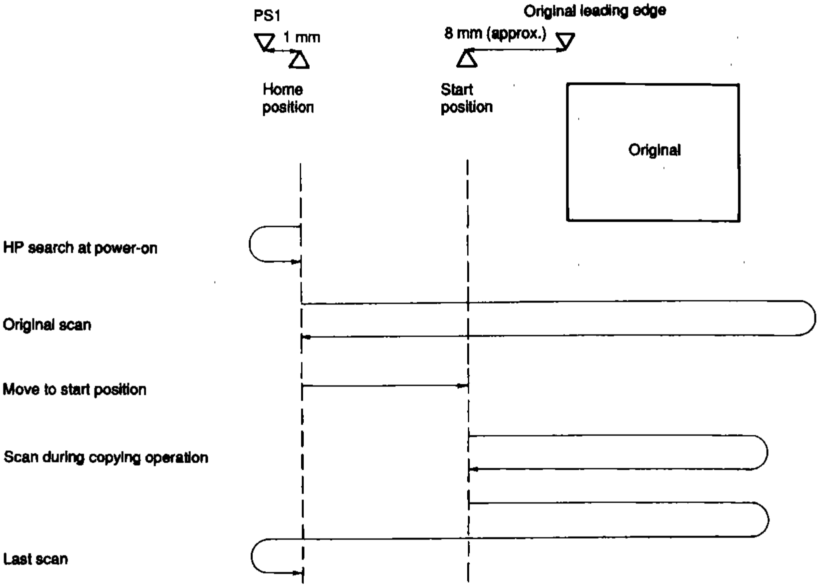

PS1
1 mm
Home position
Original leading edge
8 mm (approx.)
Start position
Original
HP search at power-on
Original scan
Move to start position
Scan during copying operation
Last scan

Figure 3-204

C. Original Scanner Motor

1. Outline

Figure 3-206 shows the circuit that controls the scanner motor with the following functions:

① Controls the rotation direction of the scanner motor.

② Controls the rotation speed of the scanner.

The original scanner motor changes its rotation direction depending on whether the scanner is moving forward or in reverse; the rotation speed when the scanner is moving forward varies depending on the selected reproduction ratio.

The rotation speed when the scanner is moving in reverse remains constant regardless of the selected reproduction ratio, and is about 10 times the speed at which it rotates when the scanner is moving forward (DIRECT), making reversal fast.

Reference:

When two sheets of copy paper is retained on the transfer drum, the distance between the two sheets is highly limited (as small as 66 mm); the scanner is moved at a speed that enables it to reverse within this short distance.

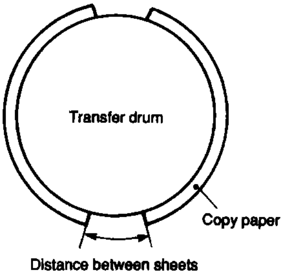

Transfer drum
Copy paper
Distance between sheets

Figure 3-205

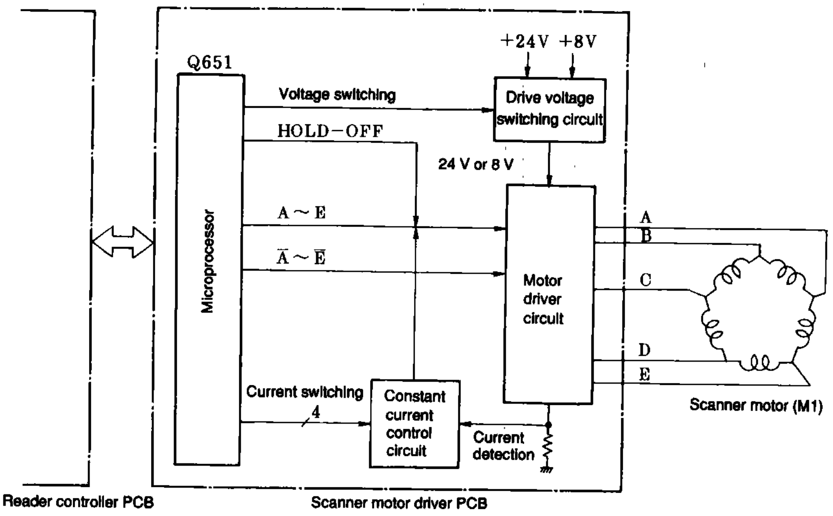

+24V +8V
Q651
Voltage switching
Drive voltage switching circuit
HOLD−OFF
24 V or 8 V
A ~ E
$\overline{A}$ ~ $\overline{E}$
Microprocessor
Motor driver circuit
A
B
C
D
E
Current switching
4
Constant current control circuit
Current detection
Scanner motor (M1)
Reader controller PCB
Scanner motor driver PCB

Figure 3-206

2. Operation

The microprocessor (Q651) on the scanner motor driver PCB receives mode, distance, and reproduction ratio instructions for the scanner from the reader controller PCB. Upon receipt, it uses the instructions and drive pulses to the scanner motor. The scanner motor is a 5-phase stepping motor, and controls the direction and speed of the scanner by changing the sequence and frequency of drive pulses (A through E).

The drive voltage switching circuit switches the power used to drive the motor from 8 V (forward) to 24 V (reverse) to rotate the motor at a high speed when moving the scanner forward and in reverse.

The constant current control circuit controls the current so that the current flowing into the motor is appropriate to each rotation speed.

When the motor is at rest during standby mode, the current flowing into the motor is cut off by the HOLD-OFF signal, thereby preventing overheating of the motor.

D. Varying the Reproduction Ratio

The reproduction ratio in the main scanning direction (drum axial) is varied by skipping image signals written in the line memory (reduction) or repeating data read from the line memory (enlargement).

The reproduction ratio in the sub scanning direction is varied by moving the mirror mount faster (reduction) or slower (enlargement).

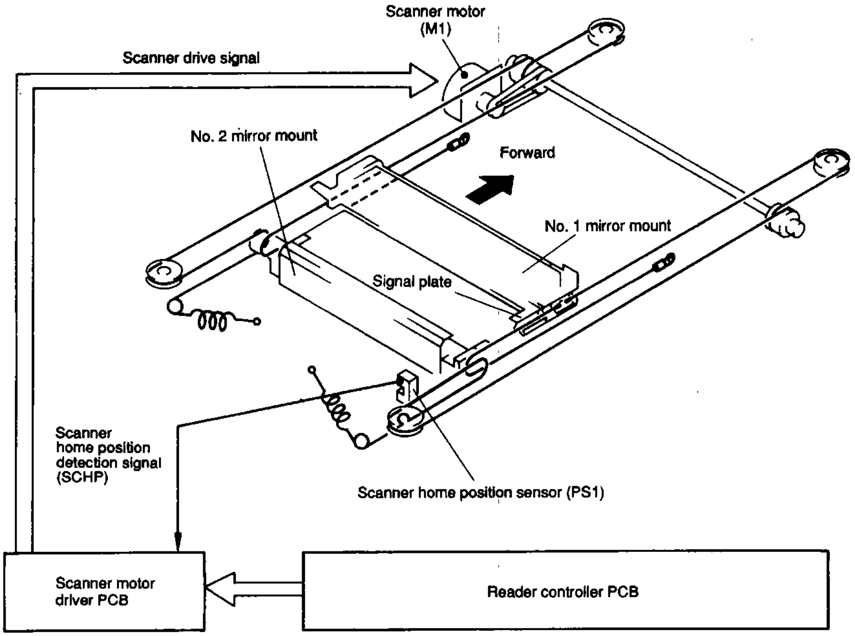

Scanner motor (M1)
Scanner drive signal
No. 2 mirror mount
Forward
No. 1 mirror mount
Signal plate
Scanner home position detection signal (SCHP)
Scanner home position sensor (PS1)
Scanner motor driver PCB
Reader controller PCB

Figure 3-207

E. Controlling the Scanning Lamp Intensity

1. Outline

Figure 3-208 shows the circuit used to control the scanning lamp intensity with the following functions:

1) Turns on and off the scanning lamp.
2) Checks if the scanning lamp is on or not.
3) Controls the scanning lamp intensity, i.e., keeping the intensity constant against fluctuations in the supply voltage.

2. Operation

a. Turning On and Off the Scanning Lamp

When LAON=0, the lamp regulator drive circuit turns off, causing the intensity control circuit to turn off and the scanning lamp (LA1) to turn off.

When LAON=1, the lamp regulator drive circuit turns on, causing the intensity control circuit to turn on and the scanning lamp (LA1) to turn on.

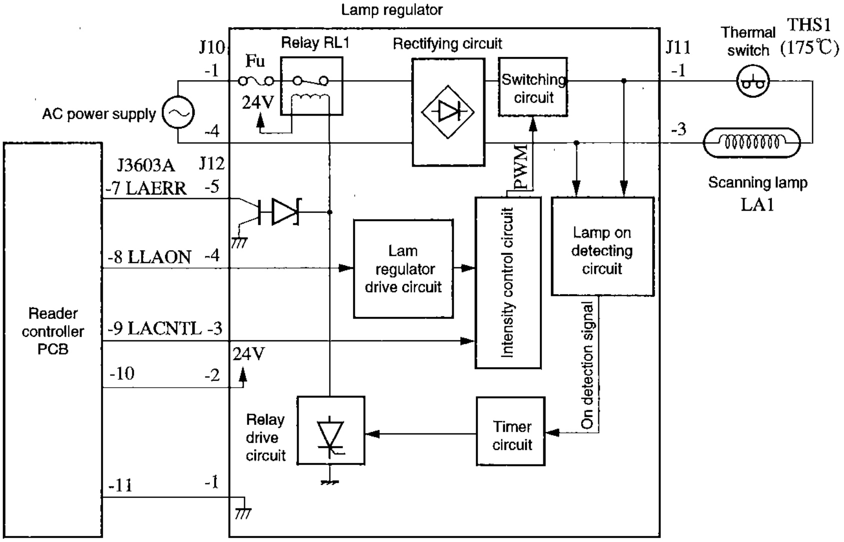

Lamp regulator
J10
-1
-4
Fu
Relay RL1
24V
Rectifying circuit
Switching circuit
AC power supply
J11
-1
-3
Thermal switch
THS1 (175℃)
Scanning lamp
LA1
J3603A
J12
-7 LAERR -5
-8 LLAON -4
-9 LACNTL -3
-10 -2
-11 -1
24V
Reader controller PCB
PWM
Lam regulator drive circuit
Intensity control circuit
Lamp on detecting circuit
On detection signal
Relay drive circuit
Timer circuit

Figure 3-208

b. Detecting the Activation of the Scanning Lamp

As long as the scanning lamp (LA1) is on, the lamp on detecting circuit remains on to send the on detection signal to the timer circuit.

If, for some error, the scanning lamp remains on for about 60 sec, the timer circuit activates the relay drive circuit to turn on the relay (RL1); the condition cuts off the AC input, thereby turning off the scanning lamp and, at the same time, sending the lamp error signal (LAERR) to the reader controller PCB. As a result, 'E220' is indicated on the control panel.

When the relay has been turned on, you may reset the copier by turning the power switch off and then on.

The copier is provided with the following two protection mechanisms to prevent the wrong activation of the scanning lamp:

- If the temperature inside the thermal switch exceeds 175°C, the thermal switch turns off to cut off the power to the scanning lamp.
- If an overcurrent flows because of a short circuit around the scanning lamp, the fuse turns off to cut off the supply power to the lamp regulator.

Caution:
The thermal switch (THS1) is used on a DC line, and its contact is subject to damage upon activation. Do not reuse the switch, or its activation after recovery may fail the mechanism.

c. Controlling the Scanning Lamp Intensity

The scanning lamp intensity is determined by the value of the intensity adjustment signal (LACNTL) sent by the reader controller PCB.

The intensity control circuit of the lamp regulator generates pulse signals (PWM) that suit the LACNTL signal to the switch circuit, and the switch circuit turns on and off at short intervals.

Varying the on/off intervals, the current supplied to the scanning lamp is controlled, thereby ultimately controlling the intensity.

The value of the LACNTL signal is determined when 'CCD' under 'FUNCTION' is executed in service mode; thereafter, the value remains the same. You must execute 'CCD' under 'FUNCTION' in service mode whenever you have replaced the scanning lamp or reader controller PCB.

III. IMAGE PROCESSING SYSTEM

A. Outline

The image processing system consists of the CCD, CCD driver PCB, analog processor PCB, and image processor PCB, and serves to convert optical images from the original exposure system into electrical signals, corrects and processes them, and sends them to the laser exposure system.

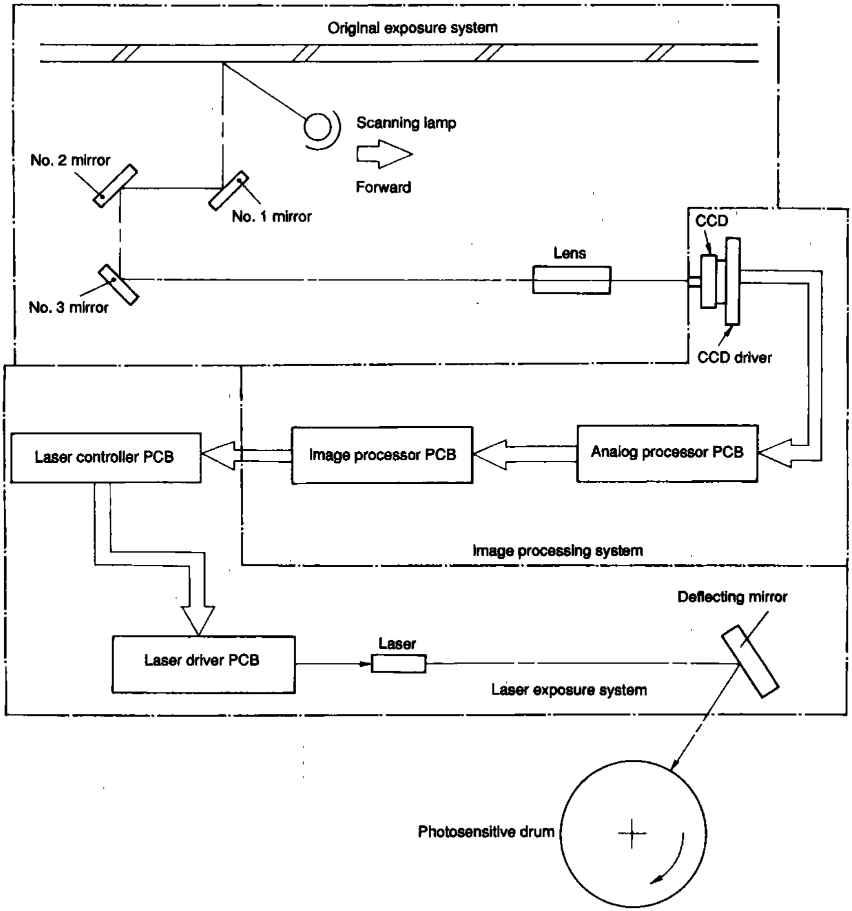

Original exposure system
Scanning lamp
Forward
No. 2 mirror
No. 1 mirror
No. 3 mirror
Lens
CCD
CCD driver
Laser controller PCB
Image processor PCB
Analog processor PCB
Image processing system
Deflecting mirror
Laser driver PCB
Laser
Laser exposure system
Photosensitive drum

Figure 3-301

B. CCD/CCD Driver

1. CCD

The CCD (charge-coupled device) used in the copier consists of three lines of about 5,000 photocells, and each CCD line is covered by a B, G, or R filter.

In addition, each CCD line consists of a transfer unit and output unit; the outputs from the odd-number light-receiving units and the even-number light-receiving units are generated by the output unit A and output unit B, respectively. In other words, the CCD lines used in the copier simultaneously generate six channels of image signals.

2. CCD Driver

The image signals generated by the CCD are sent through a buffer (lower impedance transforming circuit) to assume a low impedance and sent to the analog processor PCB.

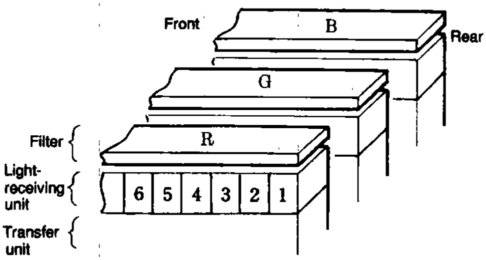

Front
B
Rear
G
R
Filter
Light-receiving unit
6
5
4
3
2
1
Transfer unit

Figure 3-302

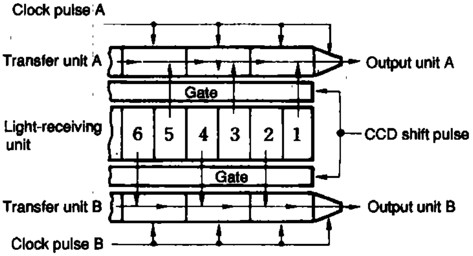

Clock pulse A
Transfer unit A
Output unit A
Gate
Light-receiving unit
6
5
4
3
2
1
CCD shift pulse
Gate
Transfer unit B
Output unit B
Clock pulse B

Figure 3-303

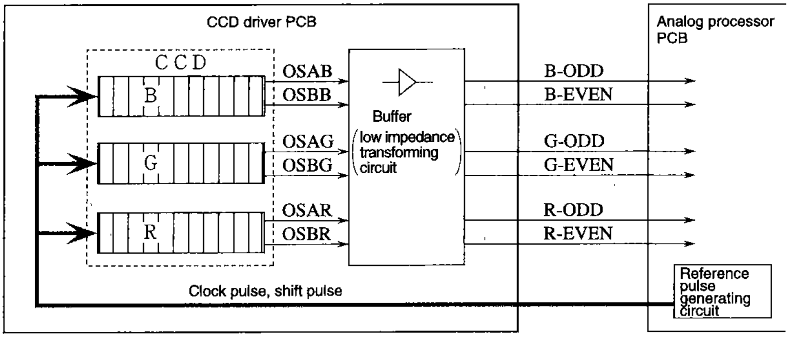

CCD driver PCB
CCD
B
G
R
OSAB
OSBB
OSAG
OSBG
OSAR
OSBR
Buffer
(low impedance transforming circuit)
B-ODD
B-EVEN
G-ODD
G-EVEN
R-ODD
R-EVEN
Analog processor PCB
Reference pulse generating circuit
Clock pulse, shift pulse

Figure 3-304

C. Analog Image Processing

The circuit processes the output of the CCD for the following:

- Odd/even bit synthesis
- BGR level matching
- A/D conversion

The six channels of image signals (odd/even bit, independent) is sample-held by the sample hold signal (SH), and synthesized into image signals of three channels (BGR) according to the select signal (SEL).

Then, BGR level-matching is executed according to the BGR gain signal and BGR offset signal for correction of the photoconversion efficiency of each CCD (B, G, R).

The A/D converting circuit operates in relation to the ADCLK signal, and converts the BGR image signals into digital signals (8 bits each) for the image processor PCB.

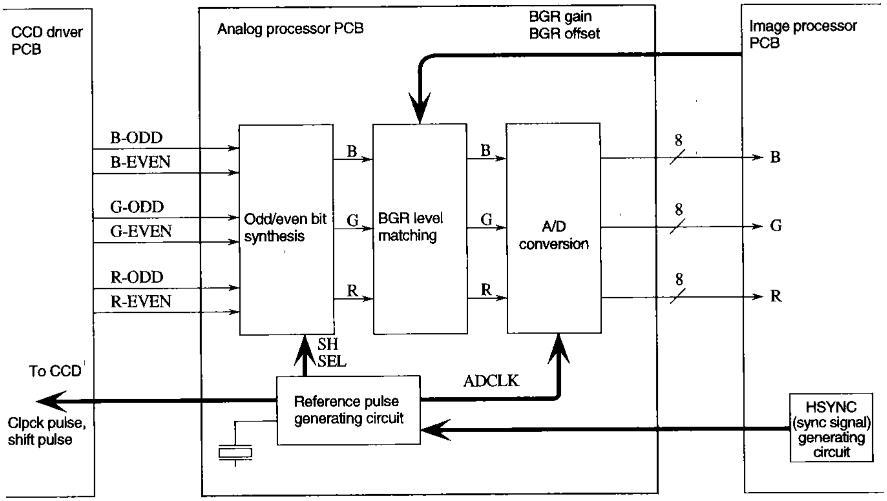

CCD driver PCB
Analog processor PCB
BGR gain
BGR offset
Image processor PCB
B-ODD
B-EVEN
G-ODD
G-EVEN
R-ODD
R-EVEN
Odd/even bit synthesis
B
G
R
BGR level matching
B
G
R
A/D conversion
8
8
8
B
G
R
SH
SEL
To CCD
Clock pulse, shift pulse
Reference pulse generating circuit
ADCLK
HSYNC (sync signal) generating circuit

Figure 3-305

D. Digital Image Processing

1. Outline

The copier performs digital image processing using the PCBs shown in Table 3-301, which are collectively called the image processor.

The BGR image signals sent by the analog image processing system are converted into YMCBk image signals in the digital image processing system.

Each specific conversion of individual data items is also executed for the appropriate image processing specified on the control panel. The image data upon conversion will be 8-bit image signals ready for transmission to the printer unit.

PCB	Description	CLC700	CLC800
IP-MOTHER	Bus for the IP PCBs.	○	○
IP-MAIN IP-KM (TYPE1 only)	Shading correction, 3-line position matching, color correction, original size detection, color property compression, logarithmic correction, coloring, outline processing, density correction, reproduction ratio/slant processing, harness/filter processing, anti-counterfeit processing, black text generation/processing (black extraction, line width detection, edge detection)	○	○
IP-ECO	Assists IP-MAIN.	○	○
IP-ED	Interface between copier and external devices, editing based on input signals from editor (color conversion, texture processing)	☐	☐
IP-IF	Interface between copier and external devices	Δ	X
IP-PRJ	Projector auto focusing, shading correction, color correction, and mirror image processing when projector is in use	Δ	Δ

Table 3-301

- ○ comes as standard; Δ is available as an option; X is not accommodated; ☐ available as option for certain models.
- For the CLC700, either IP-IF PCB or IP-ED PCB may be installed as an option.

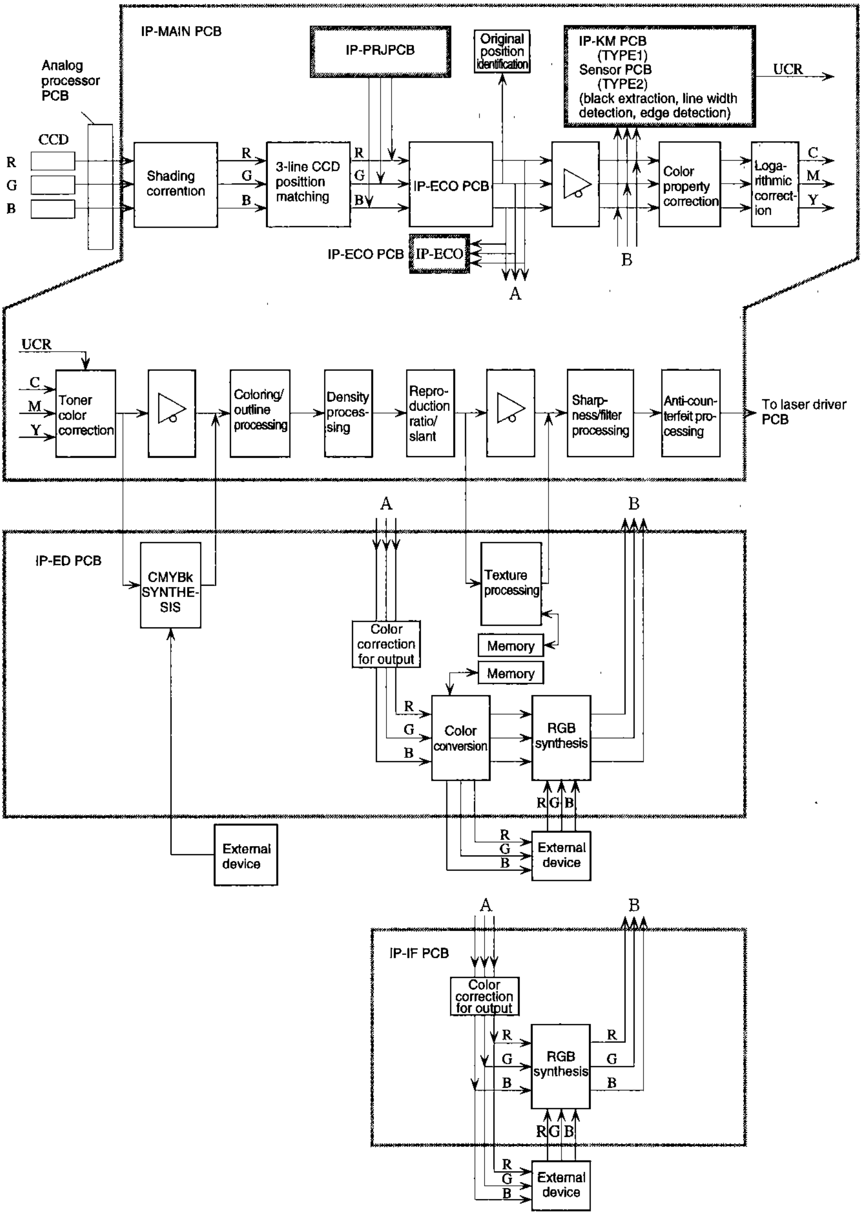

IP-MAIN PCB
Analog processor PCB
CCD
R
G
B
Shading corrention
R
G
B
3-line CCD posittion matching
IP-PRJPCB
R
G
B
IP-ECO PCB
IP-ECO PCB
IP-ECO
Original position identification
A
IP-KM PCB (TYPE1)
Sensor PCB (TYPE2)
(black extraction, line width detection, edge detection)
UCR
Color property correction
B
Loga-rithmic correct-ion
C
M
Y
UCR
C
M
Y
Toner color correction
Coloring/ outline processing
Density proces-sing
Repro-duction ratio/ slant
Sharp-ness/filter processing
Anti-coun-terfeit pro-cessing
To laser driver PCB
A
B
IP-ED PCB
CMYBk SYNTHE-SIS
Color correction for output
Texture processing
Memory
Memory
R
G
B
Color conversion
RGB synthesis
R G B
External device
R
G
B
External device
A
B
IP-IF PCB
Color correction for output
R
G
B
RGB synthesis
R
G
B
R G B
R
G
B
External device

Figure 3-306

2. Shading Correction

The output of the CCD will not necessarily be uniform even if light is reflected by an original whose density is uniform for the following factors:

- The CCD's pixels may have different sensitivities.
- The transmission characteristic of the lens differs between its center and the peripheral areas.
- The scanning lamp is subject to deterioration.

Shading correction is performed for the purpose of correcting these factors.

a. The CCD reads the bar code found beneath neath the standard white plate.

Reference 1

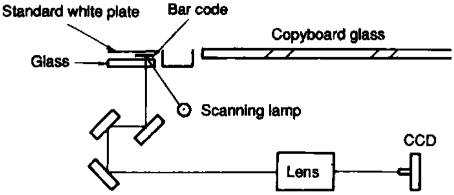

Standard white plate
Bar code
Copyboard glass
Glass
Scanning lamp
CCD
Lens

Figure 3-307

b. The CCD measures the intensity of the light reflected by the standard white plate, and generates data that represents the light.

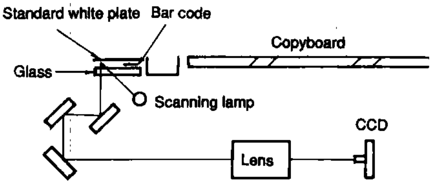

Standard white plate
Bar code
Copyboard
Glass
Scanning lamp
CCD
Lens

Figure 3-308

c. The shading correction circuit compares the measurement data of b. against the target value determined in a., and memorizes the difference as the shading correction value.

The shading correction value is used to correct data obtained during scans, and these measurements are taken each time the Copy Start key is pressed.

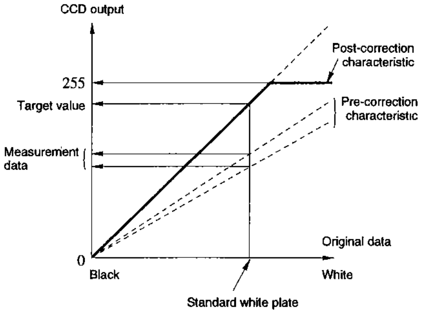


Figure 3-309

Reference:

1. A bar code is attached to the copier's standard white plate to represent the light (B, G, R) reflected by each standard white plate; measurements are taken at the factory and converted into bar code notation.
2. The color balance for light areas may be adjusted by 'OFST' under 'COL-ADJ'.
3. If the density or color balance cannot be adjusted by the base film when making copies of negative film, it is a good idea to adjust 'NEGA' under 'SH-TRGT'.
4. Scratches or dirt on the standard white plate increases shading correction for the corresponding areas, causing vertical white lines on copies.
   If lines persist after cleaning the standard white plate, you may change the position of shading correction by 'ADJ-S' under 'ADJ-XY' in service mode.

3. 3-Line CCD Position Matching

The copier's CCD is really three CCDs each covered by any of the R, G, and B filters, and the line image generated by each CCD at a specific point has a discrepancy of about 0.5 mm (for 8 lines) in relation to the copyboard glass.

This discrepancy is corrected by storing the R and G image signals temporarily in the line memory and generating them after synchronizing them with the B image signal.

Reference:

The delay in the B image signal is at its maximum when 400% enlargement is made; at this time, the R image signal is delayed for 64 lines, and the G image signal is delayed for 32 lines.

For example, when 320% enlargement is made, the R image signal must be delayed for 51.2 lines; here, the following correction is made using data representing adjacent pixels:

image data representing the 51.2 line = 0.8 x (pixel data representing the 51st line) + 0.2 x (pixel data representing the 52nd line).

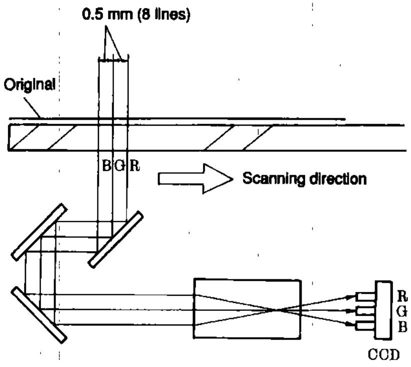


Figure 3-310

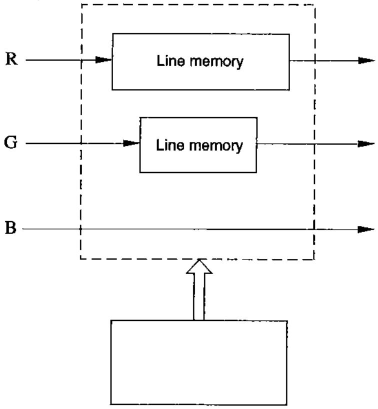


Figure 3-311

4. Sensor Color Correction Block

The sensor color correction block refers to the circuit that corrects the transmission characteristic of the B, G, and R filter of the CCD.

Each filter would be ideal if it transmitted light of a specific wavelength and reflected light of other wave lengths; since this is not the case and the filters transmit unwanted light as well, a special circuit is needed for correction.

For instance, a G filter would be ideal if it let pass 100% of light of 500 nm to 600 nm in length (green) and blocked light 500 nm or less and 600 nm or more in length.

In reality, light of a length indicated as *a* and *c* of Figure 3-312 passes through the filter while light of a length represented by *b* is blocked.

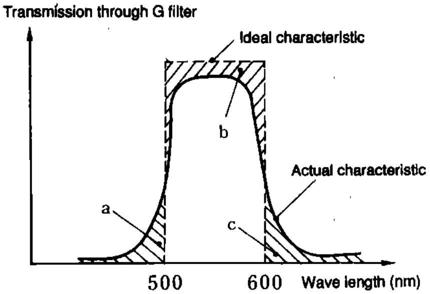


Figure 3-312

To correct the actual characteristic so that it is made as close to the ideal characteristic as possible, the following computations are made:

$$\begin{pmatrix} \text{Rout} \\ \text{Gout} \\ \text{Bout} \end{pmatrix} = \begin{pmatrix} a11 \\ a21 \\ a31 \end{pmatrix} \begin{pmatrix} a12 \\ a22 \\ a32 \end{pmatrix} \begin{pmatrix} a13 \\ a23 \\ a33 \end{pmatrix} \begin{pmatrix} R \\ G \\ B \end{pmatrix}$$

- RGB : input signal to color correction circuit.
- Rout, Gout, Bout : output signals from color correction circuit
- a11 through a33 : correction coefficient

5. Original Position Identification

The term original position identification refers to finding out the location and size of the original on the copyboard.

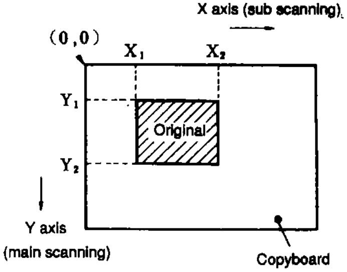


Figure 3-313

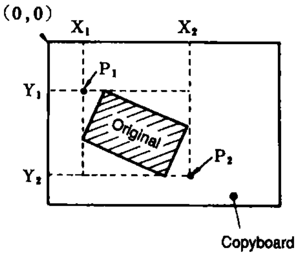


Figure 3-314

Figure 3-313 shows when a rectangular original is placed on the copyboard in relation to the X (sub scanning) and Y (main scanning) axis of the copyboard; Figure 3-314 shows when an original is placed at a slant.

The bottom of the copyboard cover is mirror-finished, i.e., unlike the copyboard cover of a conventional copier, it is not white or does not refract light; this way, the area covered by an original will reflect the light of the scanning lamp to the CCD.

- Area Covered by an Original

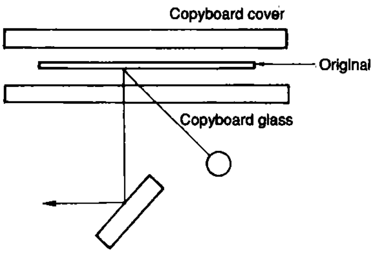


Figure 3-315

- Area Not Covered by an Original

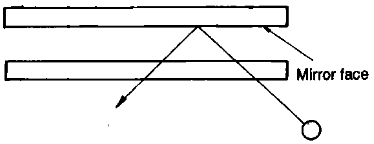


Figure 3-316

Most paper used as originals tends to be white so that the white area as detected during a scan may be identified as representing the area of the original.

In other words, a rectangle formed with a diagonal line running between coordinates Xmin/Ymin and Xmax/Ymax may be assumed to represent the original.

Placement of an original as shown in Figure 3-314, for this reason, will result in the copier's identifying the original as being of a size formed by P1 and P2.

Reference:

1. Xmin: .... stores the coordinates representing the change from first black to white.
2. Xmax: ... stores the coordinates representing the change from the last white to black.
3. Ymin: .... stores the coordinates closest to the point where the main scan started, while noting a change from black to white.
4. Ymax: ... stores the coordinates farthest from the point where the main scan started noting a change from white to black.

By automatically identifying the position and size of an original this way, automatic selection of a reproduction ratio or paper and image shifting become possible.

Caution:
Document position identification is not possible if an original is placed on the copyboard glass with an RF installed.

6. Black Extraction and Edge/Line Width Extraction

a. Outline

The copier's digital image processing block includes the IP-KM PCB, and performs the following image processing based on the BGR signals from the IP-MAIN PCB:

- black extraction
- edge extraction
- line width extraction

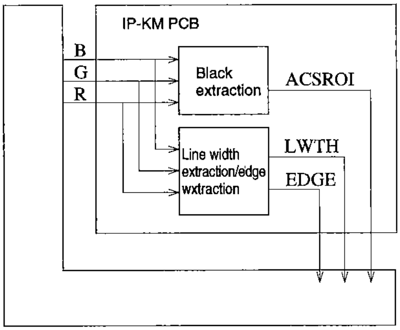


Figure 3-317

The black detection signal (ACSROI) generated by the IP-KM PCB helps the IP-MAIN PCB to generate the UCR signal. In addition, the IP-MAIN PCB uses three signals (ACSROI, EDGE, LWTH) to perform black text identification, sharpness processing level identification, laser line number switching (200/400 lines), and black original detection (ACS).

b. Black Extraction

Based on the BGR signal from the IP-MAIN PCB, the copier determines the pixel input representing either black or a color, and sends the result to the IP-MAIN PCB.

- BGR Input Identified as Black

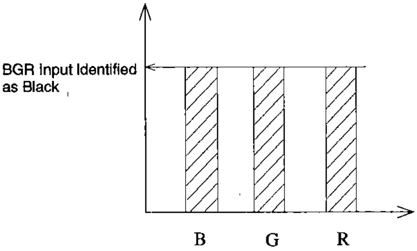


Figure 3-318

- BGR Input Identified as a Color

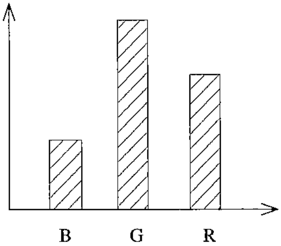


Figure 3-319

c. Edge Detection/Line Width Detection

In the edge detection/line width detection block, the BGR signal from the IP-MAIN PCB is used to generate the intensity signal representing each pixel; the intensity signals of multiple pixels surrounding the pixel in question are compared against this intensity signal.The changing number of pixels selected from among the adjacent pixels is used to determine whether the pixel in question is part of the edge of the input image; if so, the line width of the edge is also identified. When an edge is identified, the edge signal (EDGE) and line width signal (LWTH) are sent to the IP-MAIN PCB.

Reference:

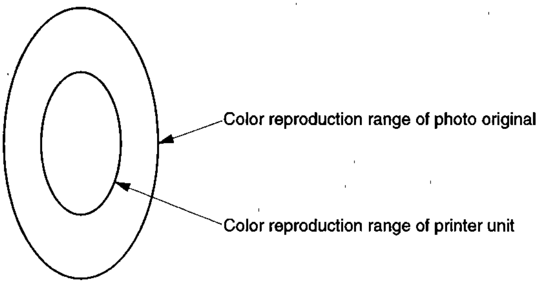
The black original detection signal (ACS) is generated based on the black detection signal (ACSROI) that is generated during pre-scanning.

7. Color Property Correction

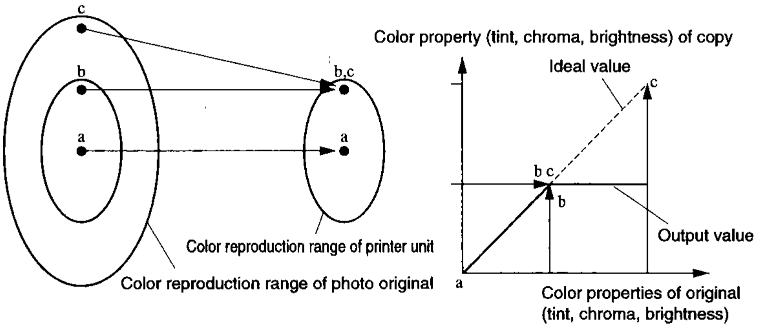
The range of color reproduction of the images generated by a photo original or computer is often greater than the printer unit's ability to reproduce color.

As shown in Figure 3-320, the conventional method enables the reproduction of original colors (points a and b) that are within the printer unit's color reproduction ability; however, since data representing a color (point c) outside the printer unit's color reproduction ability is not reproduced faithfully, there are bound to be discrepancies between the original and output images in terms of gradation.

The copier is designed so that it is aware of its printer unit's ability to reproduce color properties (tint, brightness, chroma). By determining the color properties of the original based on the RGB data it reads during pre-scanning, it converts the data to ensure that the data will be processed by its printer unit in such a way that it reproduces the colors as close to those of the original, reproducing the gradation of the original better than conventional copiers.


Color reproduction range of photo original
Color reproduction range of printer unit

- Conventional Method


c
b
a
b,c
a
Color reproduction range of printer unit
Color reproduction range of photo original
Color property (tint, chroma, brightness) of copy
Ideal value
c
b c
b
Output value
a
Color properties of original
(tint, chroma, brightness)

- CLC700/800

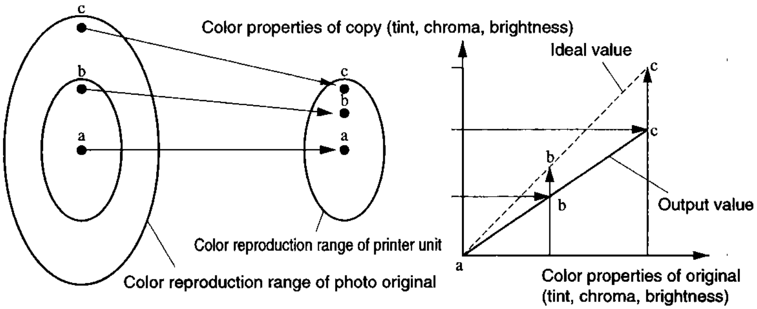

c
b
a
c
b
a
Color reproduction range of printer unit
Color reproduction range of photo original
Color properties of copy (tint, chroma, brightness)
Ideal value
c
c
b
b
Output value
a
Color properties of original
(tint, chroma, brightness)

Figure 3-320

8. Logarithmic Correction and BGR-to-YMC Conversion

a. Logarithmic Conversion

The output from the CCD has a linear characteristic in relation to the intensity of light reflected by an original; however, the density of an original as perceived by the eye is not linear.

Figure 3-321 shows the relationship between the density of an original as perceived by the eye and the output of the CCD.

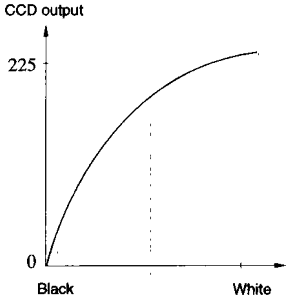


Figure 3-321

To correct the discrepancy, level conversion is performed; see Figure 3-322.

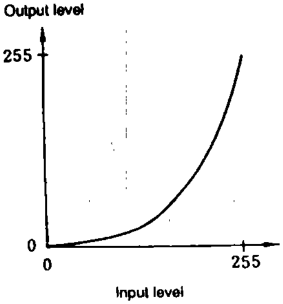


Figure 3-322

b. BGR-to-YMC Conversion

The circuit generates YMC signals taking advantage of the complementary relationship between the BGR lights and YMC toners.

Toner Light	Y	M	C
B	Absorption	Reflection	Reflection
G	Reflection	Absorption	Reflection
R	Reflection	Reflection	Absorption

Table 3-302

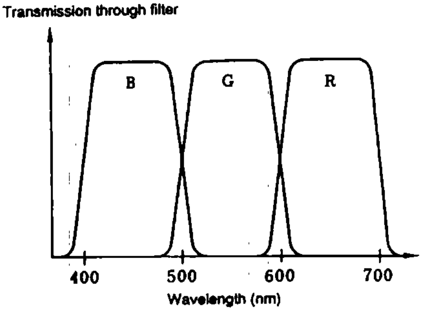


Figure 3-323

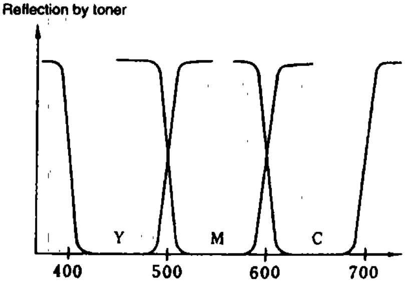


Figure 3-324

The transmission through each of the CCD filters (B, G, R) and the density of the original (Y, M, C) are complementary; level conversion is performed as in Figure 3-325 to generate each of the Y, M, and C signals.

BGR-to-YMC Conversion

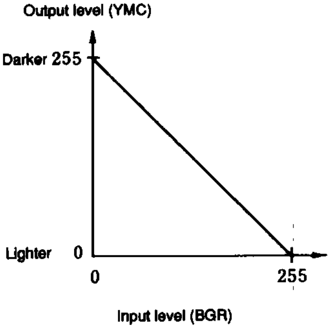


Figure 3-325

Reference:

Y=B, M=G, C=R

9. Toner Color Correction

The toner color correction block generates the Bk signal using the UCR signal from I_-KM PCB and, at the same time, corrects the reflection characteristic of each toner for the printer unit.

For instance, the M toner ideally should absorb 100% of light which is 500 nm to 600 nm in wave length (green) and reflects all light with light wave lengths of 500 nm or less and 600 nm or more; in reality, however, areas represented by a, b, and c in Figure 2-326 exist.

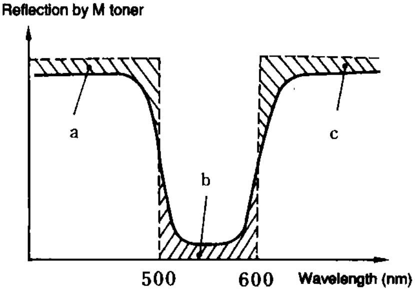


Figure 2-326

Color correction is performed to compensate for such a discrepancy.

10. Coloring/Outline Processing

The coloring/outline processing block processes/modifies image data according to the color and are specified on the control panel or by the editor. A specified area is divided into a text area and background (without image data); a text area, further, is divided into a text area, character outline area, and shade area, all of which are generated by the IP-ED PCB. Each of these areas are then subjected to image data processing/modification.

- Painting
  The specified area is painted with a speci fied color.
- User Coloring
  The image data for the specified area is converted to represent a specified color.
- Gradation
  Within the specified area, the ratio of two specified colors is varied for painting.
- Color Filtering
  Within the specified area, a fixed synthesis ratio is used to synthesize the colors represented by image data and specified colors.

11. Density Processing

The correction curve for the density processing is varied according to the settings of the following:

a. Copy Density key on the control panel
b. Color balance on the control panel
c. Color balance in service mode (COL-ADJ)
d. Light area offset adjustment in service mode (OFST of COL-ADJ)
e. Text/photo mode

According to items from a to d above, a darker or lighter curve is used as shown in Figure 3-327.

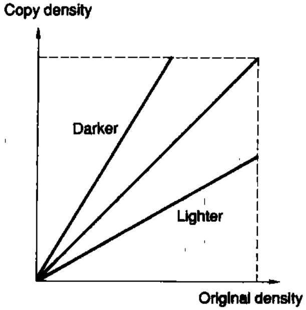


Figure 3-327

If in text mode (item e), a curve which ensures dark text without fogging will be used as in Figure 3-328.

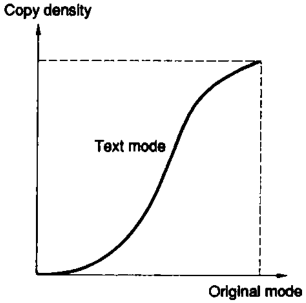


Figure 3-328

12. Reproduction Ratio/Shift/Editing Processing

a. Reproduction Ratio

① Horizontal Ratio (main scanning direction)

When writing image data to memory, data is skipped (reduction); when reading from memory, the same data may be read repeatedly (enlargement).

② Vertical Ratio (sub scanning direction)

The speed at which the scanner moves is varied, thereby changing the scanning width for a single pixel on the original.

Table 3-303 shows how the copier processes reproduction ratios.

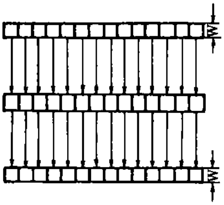
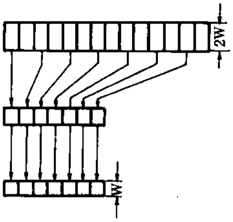
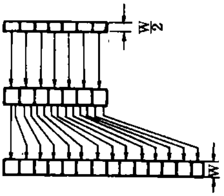
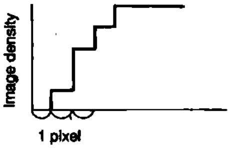
	DIRECT	REDUCE	ENLARGE
Original (image data) Line memory (reading) Copy			
Reproduction ratio in main scanning direction	All data is written in memory as it is and read as it is.	To reduce by 50%, every other data unit is written.	To enlarge by 200%, all data is written in memory as it is, but the same data is read twice.
Reproduction ratio in sub scanning direction		The scanner is moved faster to increase the scanning width for a pixel on the original.	The scanner is moved slower to decrease the scanning width of a pixel on the original.

Table 3-303

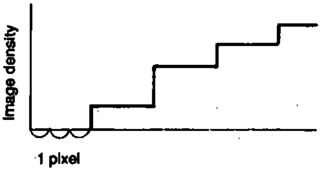
b. Enlargement Correction

When enlargement is used, the image data is corrected so that the difference in density between pixels will not vary exceedingly.

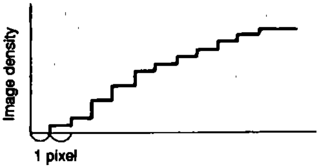
Figure 3-329 shows image data representing an original, image data at time of enlargement, and image data after enlargement correction.



a. Original



b. 300% Enlargement

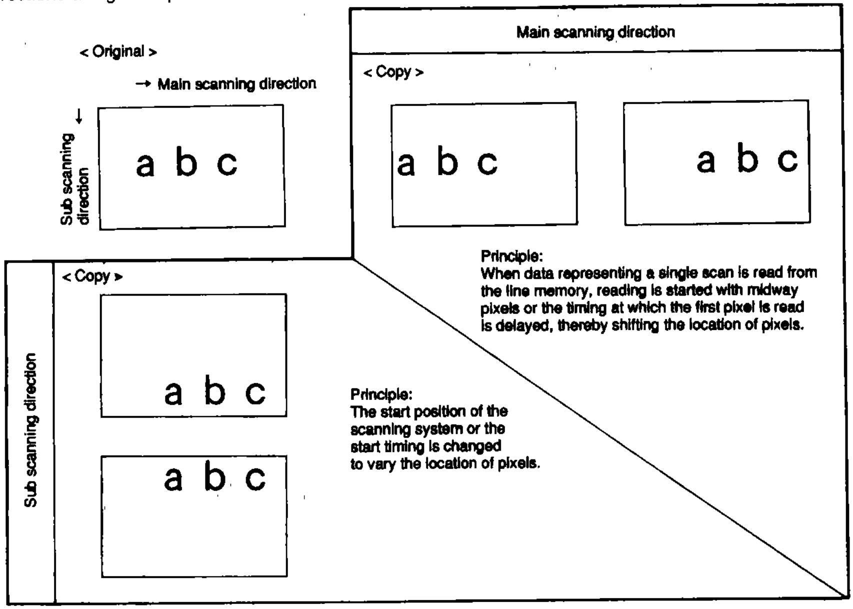


c. After Enlargement Correction

Figure 3-329

c. Shift

Figures 3-330, -331, and -332 give an outline of the shift mechanism in both main and sub scanning directions using examples.


< Original >
→ Main scanning direction
Sub scanning direction
a b c
Main scanning direction
< Copy >
a b c
a b c
< Copy >
Sub scanning direction
a b c
a b c

Principle:
When data representing a single scan is read from the line memory, reading is started with midway pixels or the timing at which the first pixel is read is delayed, thereby shifting the location of pixels.

Principle:
The start position of the scanning system or the start timing is changed to vary the location of pixels.

Figure 3-330

Supplementary Information
(shift in main scanning direction)

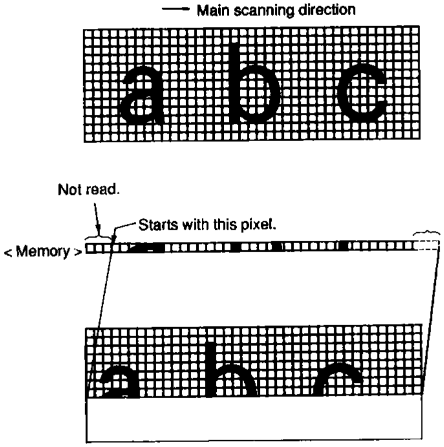

→ Main scanning direction
a b c
Not read.
Starts with this pixel.
< Memory >
a b c

Figure 3-331

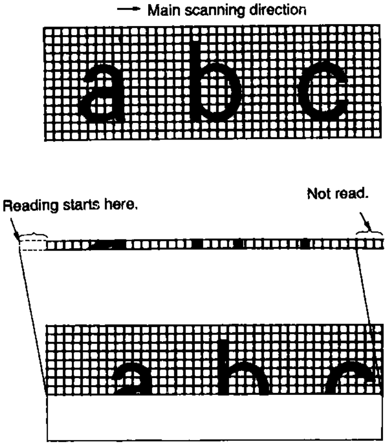

→ Main scanning direction
a b c
Reading starts here.
Not read.
a b c

Figure 3-332

Combining shifts in the main and sub scanning directions, the following shifts will be possible:

① Center Shift
From the size of the area to be shifted and the size of the copy paper used, coordinates (Xm, Ym) of a rectangle whose top/bottom and left/margins on the copy will be identical are computed, and the area is shifted to the point.

② Left/Right Binding
The entire image is shifted to provide a binding margin.

③ Specified Shift
An area is shifted for a specified distance.

Reference:

$$Xm=\frac{Xmax-(X_2-X_1)}{2},$$

$$Ym=\frac{Ymax-(Y_2-Y_1)}{2}$$

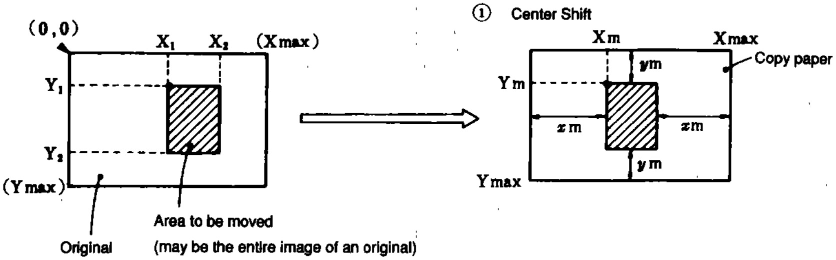

(0,0)
X1
X2
(Xmax)
Y1
Y2
(Ymax)
Original
Area to be moved
(may be the entire image of an original)
① Center Shift
Xm
Xmax
Copy paper
Ym
ym
xm
xm
ym
Ymax

Figure 3-333 Center Shift

d. Mirror Image

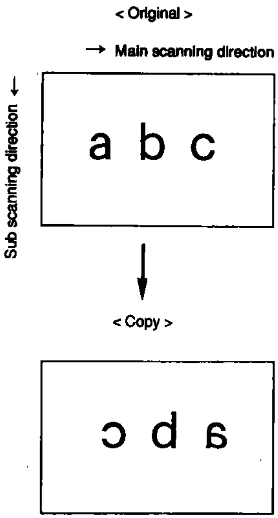

< Original >
→ Main scanning direction
Sub scanning direction →
a b c
< Copy >
ɔ d ɒ

Figure 3-334

Principle

When data representing a single scan is read from RAM, reading is executed in reversed order, thereby creating a mirror image in relation to the main scanning direction.

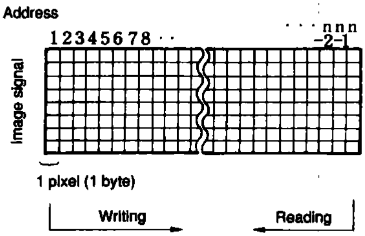

Address
1 2 3 4 5 6 7 8 · ·
· · · n n n
−2 −1
Image signal
1 pixel (1 byte)
Writing
Reading

Figure 3-335

e. Image Repeat

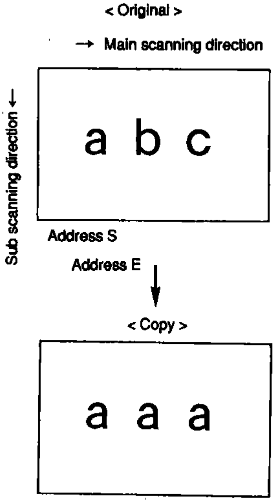

< Original >
→ Main scanning direction
Sub scanning direction →
a b c
Address S
Address E
< Copy >
a a a

Figure 3-336

Principle

When reading data representing a single line is read from RAM, the starting address (address S) and the ending address (address E) are specified; then, reading is started with address S and, when address E is reached, reading is resumed starting with address S once again. An image may be duplicated by repeating this operation.

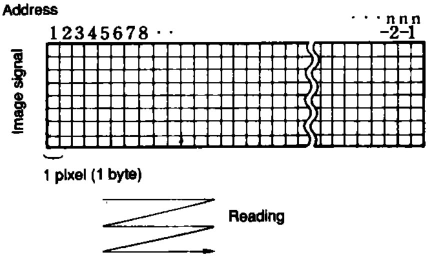

Address
1 2 3 4 5 6 7 8 · ·
· · · n n n
−2 −1
Image signal
1 pixel (1 byte)
Reading

Figure 3-337

13. Sharpness/Filter Processing

In this processing, computations are made to create sharp or soft images according to the settings of the selected copy mode or in sharpness mode.

Figure 3-339 shows the output level of image data whose input is shown in Figure 3-338 with 'Sharpness Weak' selected.

In 'Sharpness Weak', the changes in the density of the image are smoothed out to produce a soft image.

Figure 3-340 shows the output level when 'Sharpness Strong' is selected.

In 'Sharpness Strong', the changes in the density of the image is emphasized to produce a sharp image.

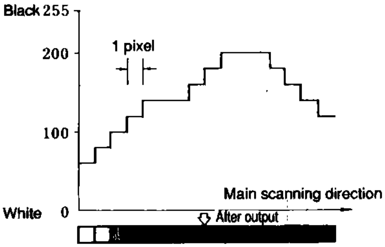


Figure 3-338 Input Level

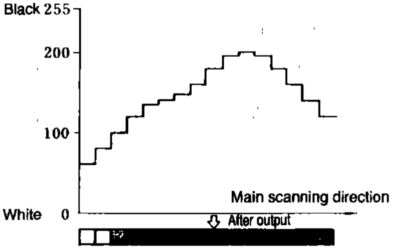


Figure 3-339 Sharpness Weak

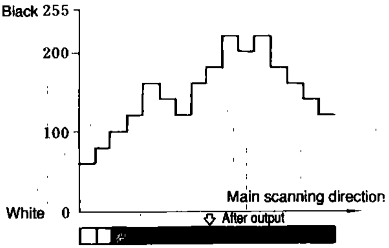


Figure 3-340 Sharpness Strong

14. CMYBk/RGB Synthesis

The CMYBk synthesis block and RGB synthesis block perform the following processing according to instructions from the control panel and editor:

- Transparent synthesis
- Gradation processing

CMBk or RGB image data from an external device (IPU) and CMYBk or RGB image data are synthesized based on the ratio specified by the control panel or editor.

RGB synthesis (w/ IP-ED PCB installed)

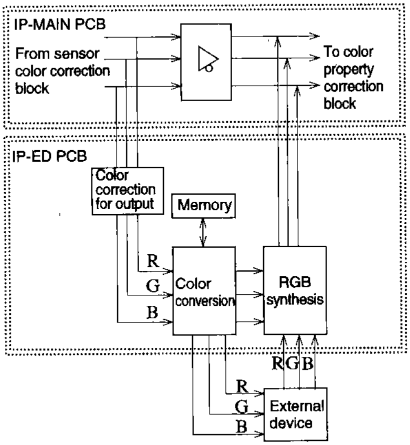

IP-MAIN PCB
From sensor color correction block
To color property correction block
IP-ED PCB
Color correction for output
Memory
R
G
B
Color conversion
RGB synthesis
R
G
B
R
G
B
External device

Figure 3-341

RGB synthesis (w/ IP-IF PCB installed)

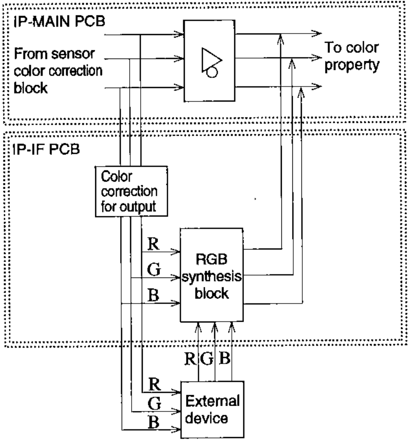

IP-MAIN PCB
From sensor color correction block
To color property
IP-IF PCB
Color correction for output
R
G
B
RGB synthesis block
R
G
B
R
G
B
External device

Figure 3-342

CMYBk synthesis

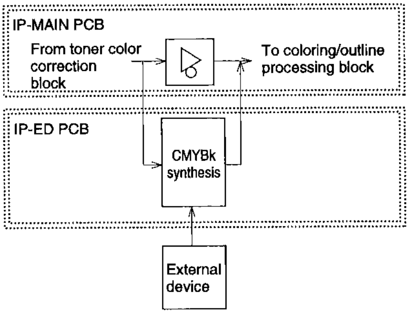

IP-MAIN PCB
From toner color correction block
To coloring/outline processing block
IP-ED PCB
CMYBk synthesis
External device

Figure 3-343

15. Texture Processing

Image data read during pre-scanning is stored according to the instructions from the control panel and is read during original image processing.

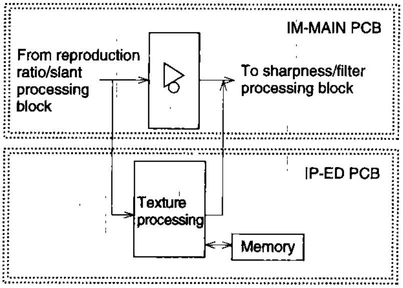

IM-MAIN PCB
From reproduction ratio/slant processing block
To sharpness/filter processing block
IP-ED PCB
Texture processing
Memory

Figure 3-344

16. Color Conversion

The color conversion block performs the following processing according to instructions sent from the control panel or editor:

- Color conversion
- Posterization
- Solarization

In the color conversion block, the RGB data that has been read is converted to color property data (tint, chroma, brightness), which will then be processed for the above; thereafter, the color property data is further converted to RGB data for transmission to the next step.

When sending images read from the scanner unit to an external device, image data is sent out by the color conversion block.

IV. LASER EXPOSURE SYSTEM

A. Outline of the Laser Exposure System

The laser exposure system consists of a laser unit, which is the source of laser beams, and a laser scanner which is equipped with an 8-facet mirror used to scan the photosensitive drum with a laser beam.

The video signals (VDO-0 through -7) from the image processor PCB are converted into laser intensity signals (LD) on the laser driver PCB, and the semiconductor laser inside the laser unit generates a laser beam according to these laser intensity signals.

The laser beam is then turned into a parallel beam having an oval cross section by a collimator lens; thereafter, it is corrected to assume a band shape by means of a cylindrical lens.

The laser beam is reflected by the 8-facet mirror rotating at a specific high speed, and directed to the photosensitive drum through imaging lenses.

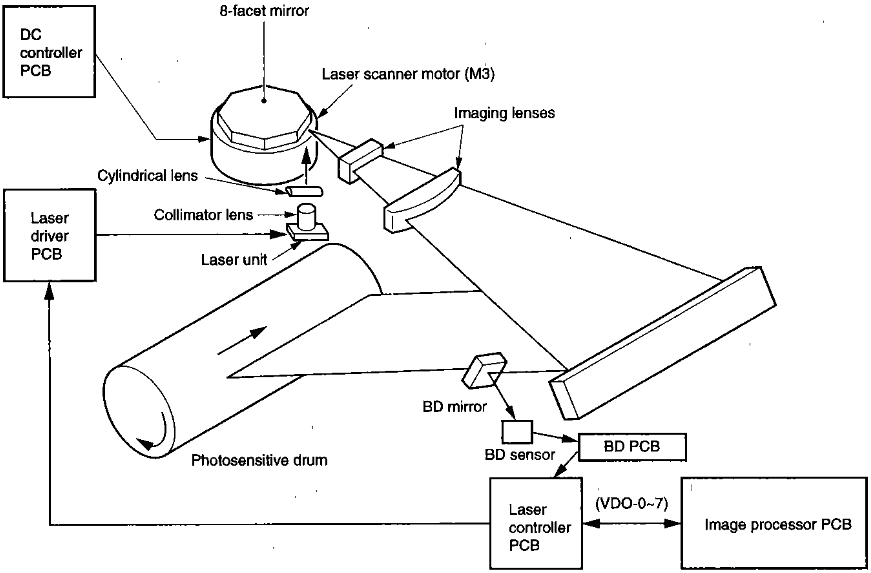

DC controller PCB
8-facet mirror
Laser scanner motor (M3)
Imaging lenses
Cylindrical lens
Laser driver PCB
Collimator lens
Laser unit
BD mirror
BD sensor
BD PCB
Photosensitive drum
Laser controller PCB
(VDO-0~7)
Image processor PCB

Figure 3-401

B. Timing Chart for the Laser Exposure System

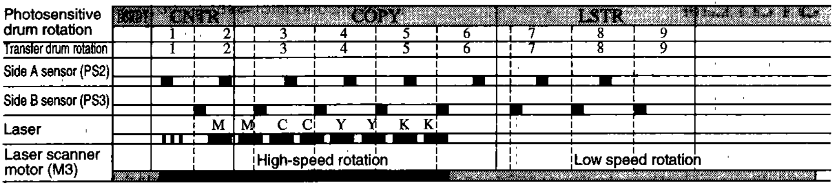


Figure 3-402 A4/LTR, 2 copies, 4-color, DIRECT, cassette 1

C. BD Signal Synthesis

The BD signal used to synchronize the video signals for the main scanning direction is generated in the beam detection signal generator circuit based on the laser beam reflected by the BD mirror found in the optical path of the laser beam.

Using the BD signal, the image processor PCB reads image signals from the CCD, performs image processing, and sends digital video signals to the laser controller PCB.

The digital video signals are converted into analog video signals on the laser controller PCB, and the laser driver PCB generates laser intensity control signals in sequence to represent these analog video signals.

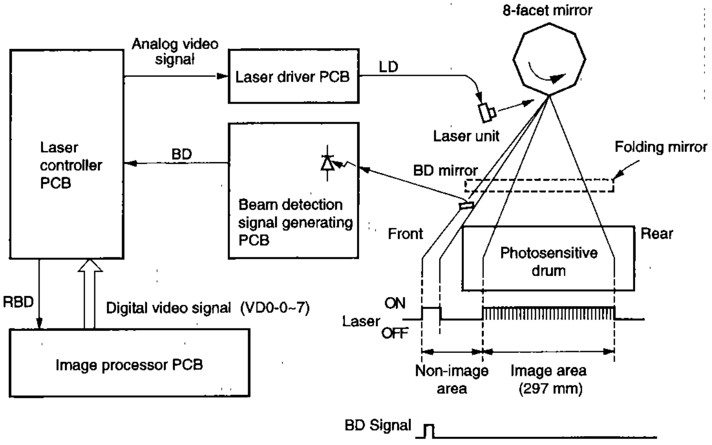

8-facet mirror
Analog video signal
Laser driver PCB
LD
Laser unit
Folding mirror
Laser controller PCB
BD
BD mirror
Beam detection signal generating PCB
Front
Rear
Photosensitive drum
RBD
Digital video signal (VD0-0~7)
ON
Laser
OFF
Image processor PCB
Non-image area
Image area (297 mm)
BD Signal

Figure 3-403

D. Laser Driver Circuit

Figure 3-404 shows the circuit that generates the laser intensity control signals based on the video signals (VDO-0 through VDO-7) from the image processor PCB to drive the semiconductor laser.

Using the 8-bit video signals, clock signals (VCLK), and sync signals (PVE) from the image processor PCB and the image leading edge signal (ITOP) from the DC controller PCB, the laser controller PCB generates the laser drive signal (L-OUT) for transmission to the laser driver circuit.

In addition, the switch signal (PH/TX) is selected by switching between text and photo to suit the selected copy mode for the main scanning direction (400 dpi for sub scanning direction).

When a test pattern is generated in service mode, the DC controller PCB sends an output command to the laser controller, where the test pattern is generated for output.

The laser controller PCB sends the auto output control signal (APCHLD) to the constant current circuit of the laser driver PCB to ensure stable laser output.

For making adjustments using VR951 through VR956, see the Service Handbook.

Reference:

L-ON (laser force on signal):
goes '1' (laser on) during laser power adjustment or when printing a test print of horizontal bands.
L-OFF (laser force off signal):
goes '1' when the front door is open (laser off).

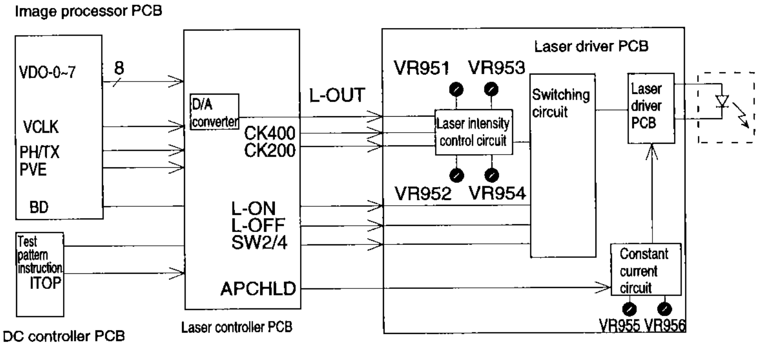


Image processor PCB
VDO-0~7
8
VCLK
PH/TX
PVE
BD
Test pattern instruction
ITOP
DC controller PCB
D/A converter
CK400
CK200
L-ON
L-OFF
SW2/4
APCHLD
Laser controller PCB
L-OUT
Laser driver PCB
VR951
VR953
Laser intensity control circuit
VR952
VR954
Switching circuit
Laser driver PCB
Constant current circuit
VR955
VR956

Figure 3-404

F. Laser Scanner Motor

The laser scanner motor (M3) is a brushless DC motor with a built-in rotation speed control circuit. When the DC controller PCB causes the laser scanner motor drive signal (M3ON*) to go '0', the motor rotates at a specific speed.

During standby, the idle operation signal (M3IDL) is caused to go '0' to initiate low-speed operation.

If the rotation speed of the motor deviates for some error, the laser scanner motor ready signal (M3RDY*) goes '1' and the DC controller PCB indicates 'E110' on the control panel.

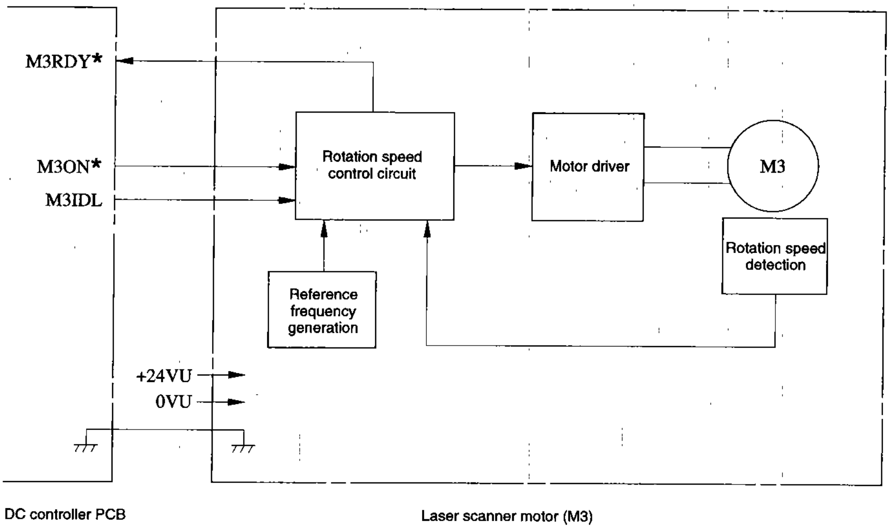

M3RDY*
M3ON*
M3IDL
Rotation speed control circuit
Motor driver
M3
Rotation speed detection
Reference frequency generation
+24VU
0VU
DC controller PCB
Laser scanner motor (M3)

Figure 3-405

V. IMAGE FORMATION SYSTEM

A. Outline

The functional construction of the copier's image formation system is as follows:

- Drum surface potential control
  Primary corona assembly grid bias control
  Developing bias control
- Drum toner density control
  Target contrast potential setting
  Gradation correction
- Primary corona ON/OFF
- Attraction brush current control
- Transfer brush current control
- Separation corona current control
- Internal static eliminator corona ON/OFF
- External static eliminator corona ON/OFF
- Photosensitive drum temperature control
- Primary corona wire cleaning control
- Developing assembly/photosensitive cleaning assembly
  Developing assembly engagement
  Color toner density detection
  Black toner density detection
  Drum toner density measurement
  Toner supply
  Photosensitive drum cleaning

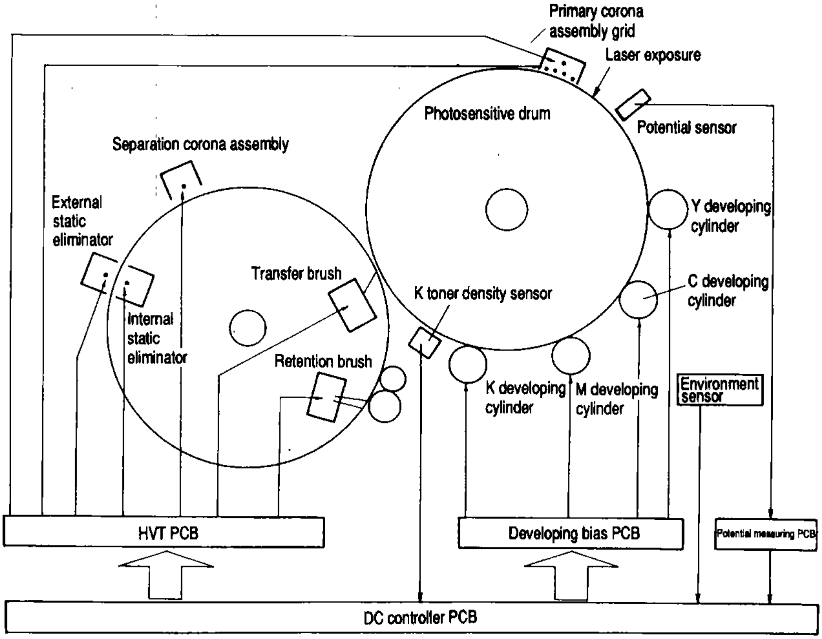

Primary corona assembly grid
Laser exposure
Photosensitive drum
Potential sensor
Separation corona assembly
External static eliminator
Transfer brush
Y developing cylinder
C developing cylinder
K toner density sensor
Internal static eliminator
Retention brush
K developing cylinder
M developing cylinder
Environment sensor
HVT PCB
Developing bias PCB
Potential measuring PCB
DC controller PCB

Figure 3-501

B. Timing Chart for the Image Formation System

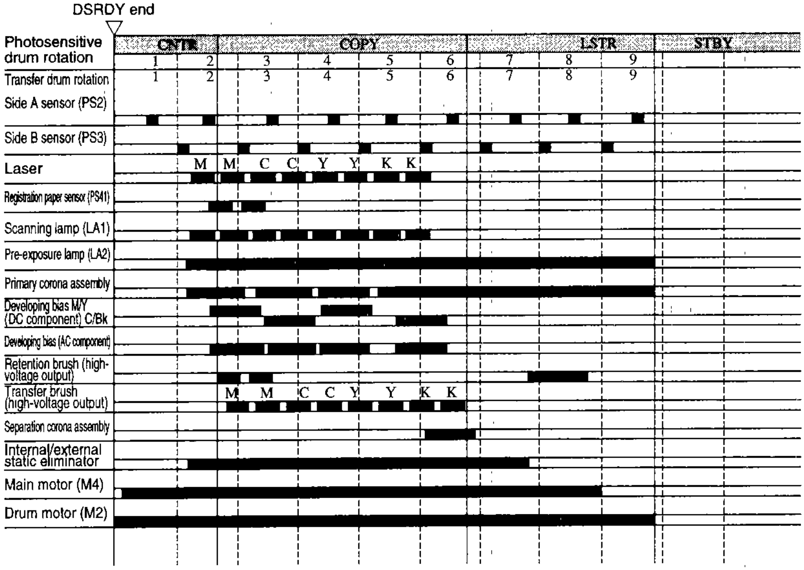


Figure 3-502 A4/LTR, 2 copies, 4-color, DIRECT, cassette 1

C. Image Stability Control

1. Outline

Copy images are subject to changes in the latent static images and development characteristics. Changes in the latent static images are often caused by

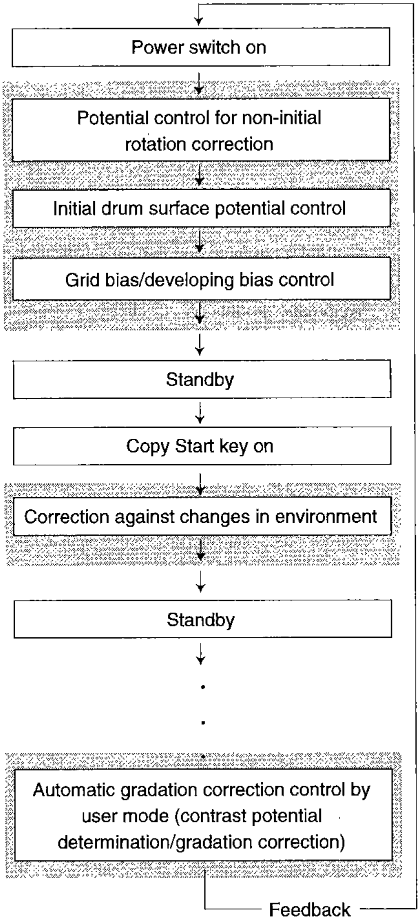
- deterioration in the sensitivity of the photosensitive drum, and
- changes in the discharge from the primary corona assembly.

Changes in the development characteristics, on the other hand, are often caused by

- changes in the toner/developer characteristics triggered by the site environment (temperature, humidity).

To ensure as much stability in the quality of the images in the presence of these factors, the copier is designed to control the grid bias of the primary corona assembly, developing bias, and laser output based on the input signals from the potential sensor and Bk toner density sensor read at time of power-on. In addition, while the copier remains on, the input signals from the environment sensor are used to correct the grid bias of the primary corona assembly and developing bias. In addition, the copier is equipped with an automatic gradation control mechanism that can be accessed in user mode.

See the flow below for an idea of the image stability control mechanism.


Power switch on
Potential control for non-initial rotation correction
Initial drum surface potential control
Grid bias/developing bias control
Standby
Copy Start key on
Correction against changes in environment
Standby
Automatic gradation correction control by user mode (contrast potential determination/gradation correction)
Feedback

	Control	Sensors	Destination of feedback
1	Initial rotation-less correction potential control	Potential sensor	Primary grid bias Developing bias
2	Initial drum surface potential control	Potential sensor	Primary grid bias Developing bias
3	Grid bias/developing bias control	Potential sensor	Primary grid bias Developing bias
4	Correction against changes in environment	Environment sensor	Primary grid bias Developing bias
5	Automatic gradation correction	———	Primary grid bias Developing bias

Table 3-501

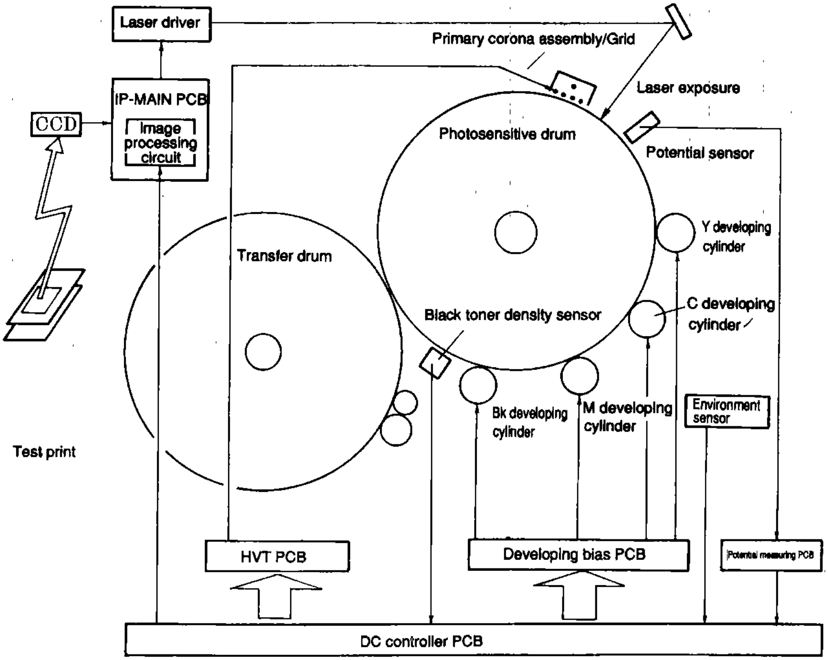

Laser driver
Primary corona assembly/Grid
Laser exposure
IP-MAIN PCB
Image processing circuit
CCD
Photosensitive drum
Potential sensor
Y developing cylinder
Transfer drum
C developing cylinder
Black toner density sensor
Bk developing cylinder
M developing cylinder
Environment sensor
Test print
HVT PCB
Developing bias PCB
Potential measuring PCB
DC controller PCB

Figure 3-503

2. Initial Rotation-less Correction Potential Control

a. Outline

Most conventional copiers execute initial rotation after a press on the Copy Start key to remove the charges from the drum surface and to even out the surface potential before starting copying operation. This copier, on the other hand, starts copying operation without such initial rotation to reduce the first copy time; this, however, is true of only when using cassette 1 as the paper source.

To compensate for the omission of initial rotation, the copier instead executes what is termed initial rotation-less correction potential control, whose data is used when making the first copy (from cassette 1).

For operation and timing, see "3. Controlling Initial Drum Surface Potential."

Reference:

Starting copying operation without initial rotation would result in different degrees of density between the first color of the first copy and the first color of the second copy in continuous copying mode caused by the difference in the surface potential occurring during the first rotation of the drum and the second and subsequent rotations.

3. Controlling the Initial Drum Surface Potential

a. Outline

The copier performs drum surface potential control at time of power-on to control the levels of the grid bias of the primary corona assembly and developing bias.

The copier executes initial drum surface potential control under the following conditions:

- When the temperature of the fixing roller is 110°C or less at power-on.
- Every 2 hr.
- When 'FUNC → EPC' is executed in service mode.

b. Surface Potential Measurement

The term *surface potential measurement* refers to taking measurements of the dark area potential (Vd) and light area potential (V_L) occurring when the grid bias (Vg) of the primary corona assembly is set to the three levels shown in Table 3-502. The potential sensor measures Vd when the laser is turned off and V_L when the laser is turned on.

(Vg1)	(Vg2)	(Vg3)
–300 V	–500 V	–700 V

Table 3-502

As shown in Figure 3-505, the grid bias is first set to Vg1, and Vd1/V_L1 is measured; then, the grid bias is set to Vg2, and Vd2/V_L2 is measured; and likewise, Vd3/V_L3 is measured.

Based on the measurements of Vd1 through 3 and V_L1 through 3, a graph of Vd and V_L like the one shown in Figure 3-504 is prepared.

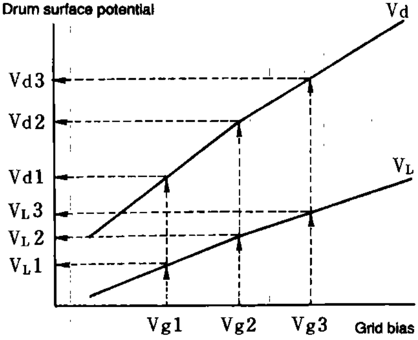


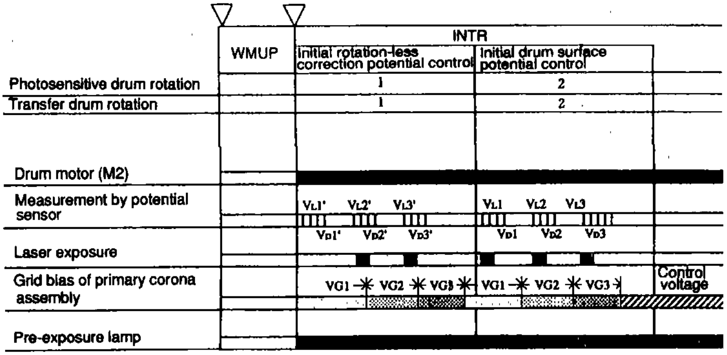
Figure 3-504

You can check the data (measurements) on the same screen by executing 'FUNC->EPC' in service mode; see the table for a guide when working in the field:

	Guide value
V00-300V	280~380
V00-500V	480~620
V00-700V	680~860
VFF-300V	35~145
VFF-500V	40~190
VFF-700V	45~235

Table 3-502A

- Sequence of Controlling Initial Drum Surface Potential


WMUP
INTR
Initial rotation-less correction potential control
Initial drum surface potential control
Photosensitive drum rotation
Transfer drum rotation
1
2
1
2
Drum motor (M2)
Measurement by potential sensor
VL1' VL2' VL3'
VD1' VD2' VD3'
VL1 VL2 VL3
VD1 VD2 VD3
Laser exposure
Grid bias of primary corona assembly
VG1 VG2 VG3 VG1 VG2 VG3
Control voltage
Pre-exposure lamp

VL1 through VL3 and VD1' through VD3' are used for the first color of the first copy when paper is from the cassette 1.

Figure 3-505

4. 'E061' (associated with drum surface potential control)

'E061' is an error code used to indicate faults associated with surface potential control.

The machine executes drum surface potential control during multiple initial rotation at power-on. The developing bias and the grid bias for each color are determined based on the measurement taken during the control and the pre-set contrast potential.

Go through the following for descriptions of how drum surface potential control is executed and computations are made, organized in relation to 'E061'.

a. explanation of the drum surface control procedure at power-on
b. explanation of the computation procedure and associated detailed codes

a. Drum Control Procedure at Power-On

Step	Drum rotation	Grid output	Laser output	Surface potential sensor
1	1st rotation	Vg1 (–300V) output	laser OFF (V00 output)	measures Vd1'
2			laser ON (VFF output)	measures VL1'
3		Vg2 (–500V) output	laser OFF (V00 output)	measures Vd2'
4			laser ON (VFF output)	measures VL2'
5		Vg3 (–700V) output	laser OFF (V00 output)	measures Vd3'
6			laser ON (VFF output)	measures VL3'
7	2nd rotation	Vg1 (–300V) output	laser OFF (V00 output)	measures Vd1
8			laser ON (VFF output)	measures VL1
9		Vg2 (–500V) output	laser OFF (V00 output)	measures Vd2
10			laser ON (VFF output)	measures VL2
11		Vg3 (–700V) output	laser OFF (V00 output)	measures Vd3
12			laser ON (VFF output)	measures VL3
13	Makes computations based on the result of measurement. (See next page.)			

b. Computation Procedure and Related Detailed Codes

Step	Description		Related detailed code	Meaning of detailed code	Possible cause
1	Back-up data check	Potential sensor offset value check.	0060	The potential offset value is 80 or less.	The potential sensor is faulty or not adjusted.
			0061	The potential offset value is 120 or more.	
2		Measurement check	0010	Vd1'/Vd2'/Vd3' is 20V or less.	The primary output is faulty.
			0011	Vd1' is 20V or less.	
			0012	Vd2' is 20V or less.	
			0013	Vd3' is 20V or less.	
			0018	Vd1/Vd2/Vd3 is 20V or less.	
			0019	Vd1 is 20V or less.	
			001A	Vd2 is 20V or less.	
			001B	Vd3 is 20V or less.	
			0020	Vd1'/Vd2'/Vd3' is 100V or less.	The grid bias output is faulty.
			0021	Vd1' is 100V or less.	
			0022	Vd2' is 100V or less.	
			0023	Vd3' is 100V or less.	
			0028	Vd1/Vd2/Vd3 is 100V or less.	
			0029	Vd1 is 100V or less.	
			002A	Vd2 is 100V or less.	
			002B	Vd3 is 100V or less.	
			0030	Vd1'/Vd2'/Vd3' is 900V or more.	The grid wire is broken.
			0031	Vd1' is 900V or more.	
			0032	Vd2' is 900V or more.	
			0033	Vd3' is 900V or more.	
			0038	Vd1/Vd2/Vd3 is 900V or more.	
			0039	Vd1 is 900V or more.	
			003A	Vd2 is 900V or more.	
			003B	Vd3 is 900V or more.	
3		Measurement comparison check	0040	The difference between Vd1' and Vd2' is 50V or less.	Primary/grid/pre-exposure lamp/poor contact/noise.
			0041	The difference between Vd2' and Vd3' is 50V or less.	
			0048	The difference between Vd1 and Vd2 is 50V or less.	
			0049	The difference between Vd2 and Vd3 is 50V or less.	
			0050	The difference between Vd1' and VL1', between Vd2' and VL2', and between Vd3' and VL3' are all 100V or less.	Laser output fault.
			0051	The difference between Vd1' and VL1' is 50V or less.	
			0052	The difference between Vd2' and VL2' is 80V or less.	
			0053	The difference between Vd3' and VL3' is 100V or less.	
			0058	The difference between Vd1' and VL1', between Vd2' and VL2', and between Vd3' and VL3' are all 100V or less.	
			0059	The difference between Vd1' and VL1' is 50V or less.	
			005A	The difference between Vd2' and VL2' is 80V or less.	
			005B	The difference between Vd3' and VL3' is 100V or less.	

Step	Description		Related detailed code	Meaning of detailed code	Possible cause
4	Computation	Computes the grid bias for each color based on the measurement.	xx04	The grid bias obtained from Vd1' through 3 and VL1' through 3 is 200V or less.	The photosensitive drum has deteriorated, or the laser output is faulty.
			xx05	The grid bias obtained from Vd1' through 3 and VL1' through 3 is 900V or more.	
			xx0C	The grid bias obtained from Vd1 through 3 and VL1 through 3 is 200V or less.	
			xx0D	The grid bias obtained from Vd1 through 3 and VL1 through 3 is 900V or more.	
5		Computes the laser output (V00) for each color based on measurement.	xx00	The laser output (V00) obtained from Vd1' through 3' and VL1' through 3' is 100V or less.	
			xx01	The laser output (V00) obtained from Vd1' through 3' and VL1' through 3' is 900V or more.	
			xx08	The laser output (V00) obtained from Vd1 through 3 and VL1 through 3 is 100V or less.	
			xx09	The laser output (V00) obtained from Vd1 through 3 and VL1 through 3 is 900V or more.	
6		Computes the developing bias for each color based on measurement.	xx06	The developing bias obtained from Vd1' through 3' and VL1' through 3' is 200V or less.	
			xx07	The developing bias obtained from Vd1' through 3' and VL1' through 3' is 700V or more.	
			xx0E	The developing bias obtained from Vd1 through 3 and VL1 through 3 is 200V or less.	
			xx0F	The developing bias obtained from Vd1 through 3 and VL1 through 3 is 700V or more.	
7		Computes the laser output (VFF) for each color based on measurement.	xx02	The laser output (VFF) obtained from Vd1' through 3' and VL1' through 3' is 10V or less.	
			xx03	The laser output (VFF) obtained from Vd1' through 3' and VL1' through 3' is 800V or more.	
			xx0A	The laser output (VFF) obtained from Vd1 through 3 and VL1 through 3 is 10V or less.	
			xx0B	The laser output (VFF) obtained from Vd1 through 3 and VL1 through 3 is 800V or more.	

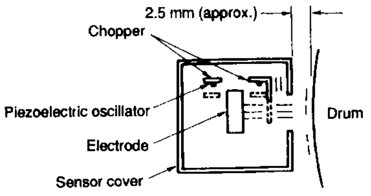
5. Potential Measuring Circuit

Figure 3-508 is a block diagram of the potential measuring circuit.

A charge equivalent of the drum surface potential is induced on the electrode within the sensor by the work of an electrical power line and turned into an AC voltage by the opening/closing action of the chopper and sent to the pre-amplifier; thereafter, it is sent to the filter/gain adjusting circuit on the potential measuring PCB.

The filter/gain adjusting circuit removes electrical noise from the AC signals coming from the pre-amplifier of the sensor and, after further amplifying the AC signals, it sends them to the sync clamp circuit through a photocoupler.

The AC signals coming from the filter circuit and gain adjusting circuit and the sync signals which have been adjusted in the sync signal adjusting circuit are combined in the sync clamp circuit to identify whether the drum surface potential is positive or negative.



2.5 mm (approx.)
Chopper
Piezoelectric oscillator
Electrode
Sensor cover
Drum

Figure 3-506 Sensor Cross Section

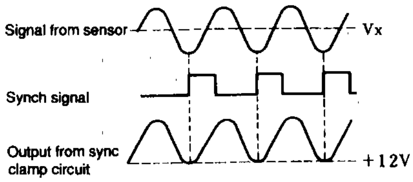
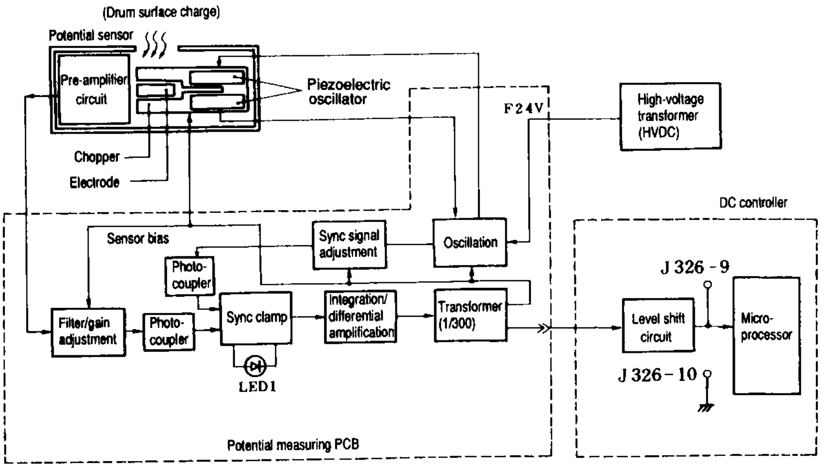


Figure 3-507 Surface Potential Greater than Sensor Bias



(Drum surface charge)
Potential sensor
Pre-amplifier circuit
Piezoelectric oscillator
Chopper
Electrode
F24V
High-voltage transformer (HVDC)
DC controller
Sensor bias
Photo-coupler
Sync signal adjustment
Oscillation
Integration/ differential amplification
Transformer (1/300)
Filter/gain adjustment
Photo-coupler
Sync clamp
LED1
J326-9
J326-10
Level shift circuit
Micro-processor
Potential measuring PCB

Figure 3-508

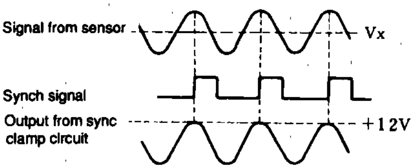


Figure 3-509 Sensor Bias Greater than Surface Potential

The output of the sync clamp circuit is processed (integrated) by the integrating circuit and is applied to the transformer. According to the output signal, the output of the transformer varies between 0 V and –600 V and is applied to the sensor; at the same time, its voltage is lowered to 1/300 and sent to the level shift circuit of the DC controller PCB.

A 0V-reference signal is converted to a 1V-reference signal and, at the same time, the signal is amplified (to about 1/255).

The level shift circuit output signal (analog) is sent to the microprocessor on the DC controller as it is.

a. Making Checks

① Checking Activation of LED1

Normally, LED1 remains on as long as the copier is supplied with power.

Otherwise, suspect that the F24V power is not supplied to the power supply or the potential measuring unit is faulty.

Reference:

You may assume that the potential sensor is operating normally if LED1 is on normally.

6. Setting the Grid Bias and Developing bias

The grid bias and developing bias DC component are determined based on VD and VL obtained by initial drum surface potential control and the target contrast potential obtained by automatic gradation correction control in user mode.

To ensure the absence of fogging on copies, a line is drawn for the developing bias DC (Vdc) at points (differ depending on moisture content) that represent the sum of Vd and Vback (about +120 V).

A point is located where the potential (contrast potential) between Vdc and V_L is identical to the target contrast potential; see Figure 3-510.

Based on such a point, the target values for the gird bias and developing bias are obtained.

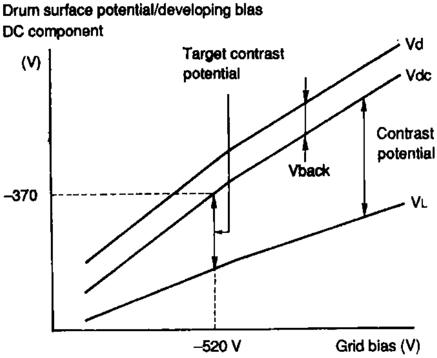


Figure 3-510

Reference:

- Target Contrast Potential

  The term *contrast potential* refers to a potential in between Vdc and V_L (developing bias).

  The characteristics of the developer tend to change according to the environment around the developing assembly, affecting the density of the images. A constant degree of image density may be obtained unaffected by changes in the environment through controlling the contrast potential.

  See Figure 3-511 for the relationship between the changes in the environment and optimum contrast potential.

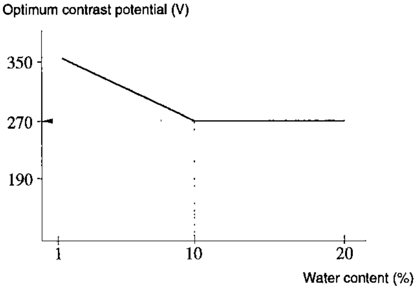


Figure 3-511

Conventional copiers determine the optimum contrast potential based on the data read by the environment sensor at time of power-on; by auto-matic gradation correction control.

Reference:

- Setting the Manual Contrast Potential
  To provide means for checking the potential control system, the copier offers seven-step contrast potential selections; you may select/switch any of the settings in service mode. However, note that individual contrast potential settings are fixed and cannot be varied.

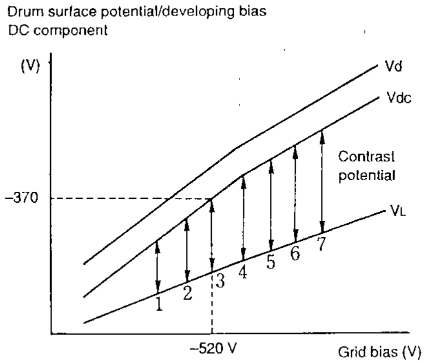


Figure 3-512

5. Correction against Changes in the Environment

The characteristics of the developer are subject to changes in the environment around the developing assembly, affecting the image density.

The copier is designed to find out the target contrast potential during automatic gradation correction control in user mode; in addition, to suit the changes that may have taken place in the environment, the copier is equipped with an environment sensor to monitor the temperature and humidity around the developing assembly. The copier corrects the target contrast potential based on the measurements taken by the sensor in response to each press on the Copy Start mode.

6. Automatic Gradation Correction Control in User Mode

The relationship between the laser output and the image density is as shown in Figure 3-513.

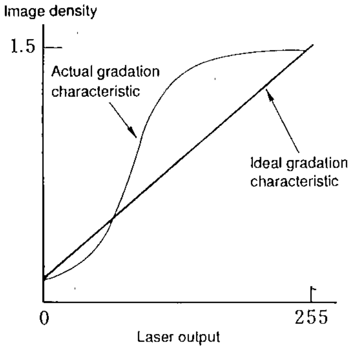


Figure 3-513

The copier actually develops, transfers, and fixes a solid patch of each color and of halftone in 64 gradations; the density of the output image is read by the CCD of the reader unit.

The contrast potential is determined based on the density data of each solid patch and the actual gradation characteristics are examined based on the density data of 64-gradation halftone outputs to correct the laser output, thereby realizing ideal gradation characteristics.

b. Operations

See Chapter 1 for how to make use of user mode.

1) In user mode, generate Test Print 1 for automatic gradation correction, i.e., halftone and solid patches (Figure 3-514).

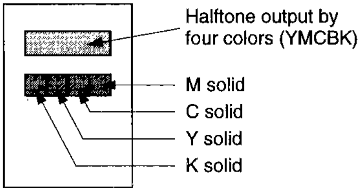


Figure 3-514 Test Print 1

2) On Test Print 1, check the density for difference and the images for faults; as necessary, perform the Basic Image Adjustment Procedure. If no fault is found, operate the reader unit to read in the solid images.
   The data representing these solid images is used to determine the contrast potential.
3) In user mode, generate Test Print 2 for automatic gradation correction (64 gradations for each color; Figure 3-515). At this time, the copier uses the contrast potential it determined in step 1 above.

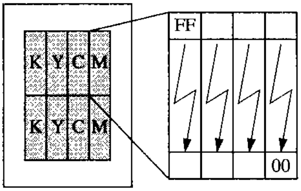


Figure 3-515 Test Print 2

4) Operate the reader unit to read Test Print 2. The copier prepares a graph representing the output and input values (Figure 3-513), and determines the correction value to ensure an ideal gradation characteristic.

D. Controlling the Grid Bias

1. Outline

The grid bias of the copier's primary corona assembly is controlled by the grid bias level signal (HVGI) from the DC controller PCB and sent to the HVT PCB; see Figure 3-516.

The grid bias level signal (HVGI) is an analog signal of between +8 V and +16 V generated by the DC controller PCB based on data obtained by controlling the potential. A grid voltage that corresponds to the grid bias level signal (HVGI) is applied to the grid wire of the primary corona assembly.

The HVT PCB also serves to supply the potential measuring PCB with power.

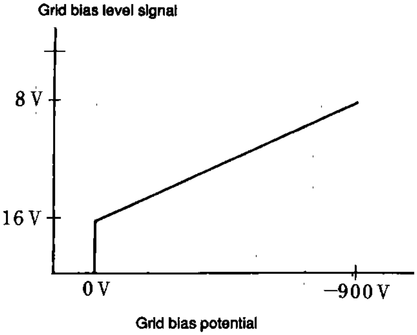


Figure 3-516

2. Operation

As long as the power switch remains on, the high-voltage control IC (IC1) on the HVT PCB keeps the grid bias drive signal (HVGC) on, and the grid bias high-voltage transformer remains on. If the grid bias level signal (HVGI) drops below 16 V, a grid bias corresponding to HVGI is supplied; at this time, the constant voltage control circuit feeds the grid bias voltage as reference to control the grid bias to a constant voltage.

The overcurrent detecting circuit is provided as a protection circuit; if a short-circuit or the like occurs on the grid wire, and the overcurrent detection signal (HVGOC) is sent to the high-voltage control IC (IC1), the high-voltage IC (IC1) causes the grid bias drive signal (HVGC) to remain '0' for 0.1 sec. Then, the circuit returns to normal; if the grid wire continues to have a short circuit, the entire copy will carry error images.

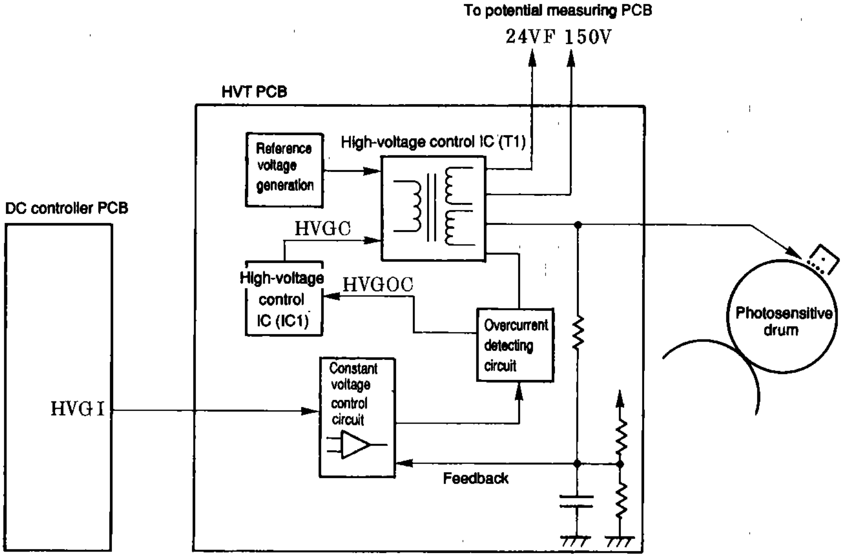

To potential measuring PCB
24VF
150V
HVT PCB
Reference voltage generation
High-voltage control IC (T1)
DC controller PCB
HVGC
High-voltage control IC (IC1)
HVGOC
Overcurrent detecting circuit
Photosensitive drum
HVGI
Constant voltage control circuit
Feedback

Figure 3-517

E. Controlling the Developing Bias

1. Outline

The copier's developing bias consists of double blank pulses and DC bias, and is generated in the developing bias PCB.

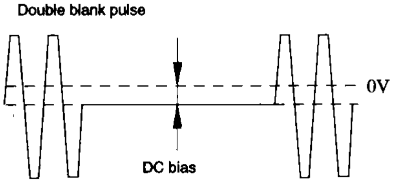


Figure 3-518

As shown in Figure 3-518, the developing bias PCB consists of the double blank pulse high voltage generating circuit, double blank pulse high voltage generating circuit, and double blank pulse output switching circuit used in common by four colors; in addition, it has two DC bias generating circuits, one each for M/Y and C/Bk. The double blank pulses generated by the circuit are switched into the two channels of MY/CBk by the double blank pulse output switching circuit and, after being synthesized with the DC bias, are sent to the output switching circuit; then, the pulses are sent to the developing assembly of each colors at such times as controlled by the DC controller PCB. As many as eleven lines of control signals from the DC controller PCB are sent to the developing bias PCB, each executing its respective control.

- Developing bias PCB drive control (DESBY)
- Double blank pulse on/off control (DBBPC1, DBBPC2)
- DC bias on/off control (DBDCC1, DBDCC2)
- DC bias application voltage level control (DBDCI1, DBDCI2)
- MCYBk switching control (DBS1, DBS2, DBS3, DBS4)

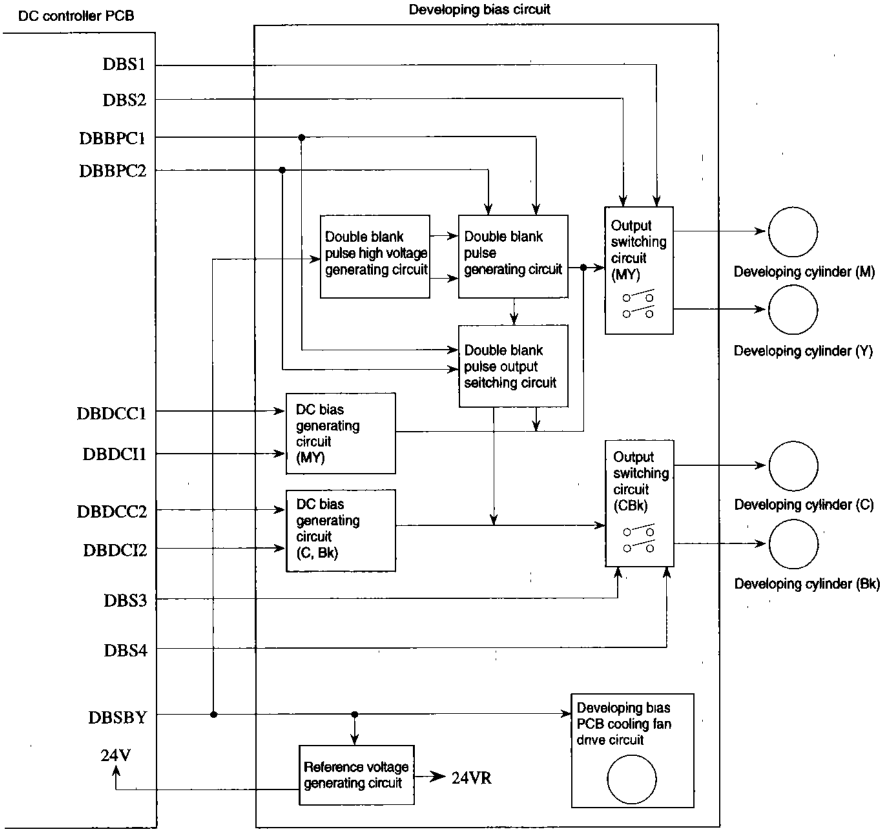

DC controller PCB
Developing bias circuit
DBS1
DBS2
DBBPC1
DBBPC2
Double blank pulse high voltage generating circuit
Double blank pulse generating circuit
Output switching circuit (MY)
Developing cylinder (M)
Developing cylinder (Y)
Double blank pulse output seitching circuit
DBDCC1
DBDCI1
DC bias generating circuit (MY)
DBDCC2
DBDCI2
DC bias generating circuit (C, Bk)
Output switching circuit (CBk)
Developing cylinder (C)
Developing cylinder (Bk)
DBS3
DBS4
DBSBY
24V
Reference voltage generating circuit
24VR
Developing bias PCB cooling fan drive circuit

Figure 3-519

2. Operation

a. Drive control of Developing Bias PCB

- DBSBY=0

→ Reference voltage generating circuit turns on and developing bias PCB cooling fan drive circuit turns on

→ Power supplied to each circuit and developing bias PCB cooling fan turns on

b. On/Off Control of Double Blank Pulses

- DBSBY=1

→ Double blank pulse high voltage generating circuit turns on

- DBBPC=1

→ High-voltage supplied to double blank pulse generating PCB

→ Double blank pulse output circuit turned on

c. On/Off Control of DC Bias and Level Control

The developing DC bias is turned on and off by DBDCC1 and DBDCC2; DBDCC1 is the drive signal of the Y/M bias generating circuit, and DBDCC2 is the drive signal of the C/K bias generating circuit.

Based on the data obtained by potential control, the DC controller generates the DC level signal (DBDCI1, DBDCI2) for the developing bias. DBDCI1 serves as the DC level signal for C and K; DBDCI1 and DBDCI2 are analog signals of between +8 V and +16 V, and a DC bias that corresponds to the DC level signal is sent to the output switching circuit.

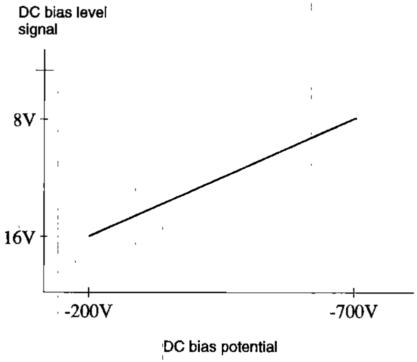


Figure 3-520

d. MCYBk Switching Control

The double blank pulses and DC bias are supplied to the developing cylinder after they are sent to the output switching circuit by the developing bias selection signal (DBS1, DBS2, DBS3, DBS4).

DBS1=1, DBS2, DBS3, DBS4=0: this condition supplies the M developing cylinder with a developing bias.

DBS2=1, DBS1, DBS3, DBS4=0: this condition supplies the Y developing cylinder with a developing bias.

DBS3=1, DBS1, DBS2, dBS4=0; this condition supplies the C developing cylinder with a developing bias.

DBS4=1, DBS1, DBS2, DBS3=0: this condition supplies the BK developing cylinder with a developing bias.

F. Controlling the Primary Corona Current

1. Outline

Figure 3-521 shows the circuit that controls the primary corona and has the following functions.

- Turns on and off the primary corona current. The copier's primary corona current output is controlled to a specific current to eliminate the effects of changes in the environment on the corona discharge.

2. Operation

The primary corona current is turned on and off by the primary corona current on signal (HVPR*).

- HVPR*=0
  Variable pulse width oscillating circuit turns on.
  Primary high-voltage transformer turns on.
- HVPR*=1
  Variable pulse width oscillating circuit turns off.
  Primary high-voltage transformer turns off.

The level of the primary corona current is fed back to the variable width oscillating circuit; a specific current is maintained through comparison of the level against the reference voltage.

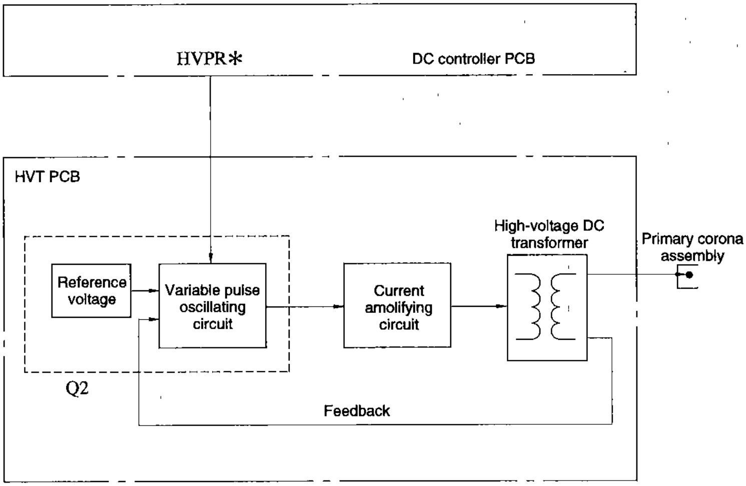

HVPR*
DC controller PCB
HVT PCB
High-voltage DC transformer
Primary corona assembly
Reference voltage
Variable pulse oscillating circuit
Current amolifying circuit
Q2
Feedback

Figure 3-521

G. Controlling the Attraction Charge Current

1. Outline

Figure 3-522 is a block diagram of the retention charge current control circuit.

The circuit is controlled by the retention charge current on/off control signal (HVATC) and retention charge current level control signal (HVATI) from the DC controller PCB.

The DC controller PCB generates HVATI of an appropriate level according to the type of copy paper (plain, thick, transparency) and the temperature and humidity registered by the environment sensor. The circuit controls the retention charge current to a specific level of current as in the case of the primary corona current.

To suit the selected copy mode, the potential of the transfer drum sheet is controlled between –7.5 kV and +5 kV while the retention brush is on.

To enable this, the circuit is provided with a mechanism that shifts the high-voltage output between positive and negative polarities depending on the output current.

2. Operation

HVATC=1

→ A charge current according to the level of HVATI (8 V to 16 V) is generated.

HVATC=0

→ The charge current output is '0' regardless of the level of HVATI.

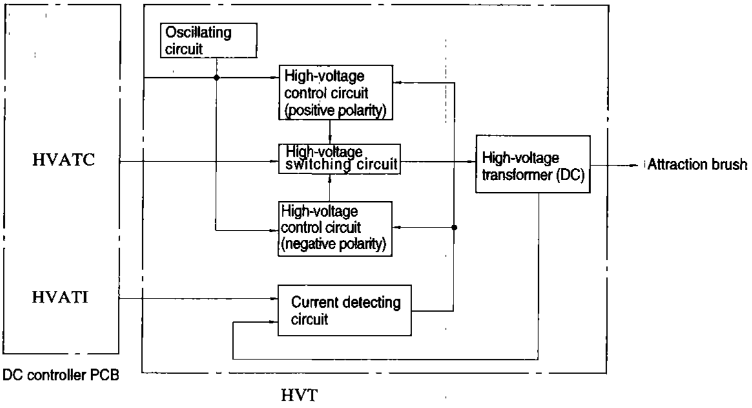

Oscillating circuit
High-voltage control circuit (positive polarity)
High-voltage switching circuit
High-voltage control circuit (negative polarity)
High-voltage transformer (DC)
Attraction brush
HVATC
HVATI
Current detecting circuit
DC controller PCB
HVT

Figure 3-522

H. Controlling the Transfer Charge Current

1. Outline

Figure 3-523 is a block diagram of transfer charge current control circuit.

The circuit is controlled by the transfer charge current on/off control signal (HVTRC) and transfer charge current level control signal (HVTRI) from the DC controller PCB.

The DC controller PCB generates HVTRI of an appropriate level to suit the type of copy paper (plain, thick paper, transparency) and the temperature and humidity registered by the environment sensor. The circuit controls the transfer charge current to a specific level of current as in the case of the primary corona current.

To suit the selected copy mode, the potential of the transfer drum sheet is controlled to any of four settings between –7.5 kV and +5 kV while the transfer brush is on.

To enable this, the circuit is equipped with a mechanism that switches the high-voltage between positive and negative polarities according to the output current.

2. Operation

HVTRC=1

→ A charge current according to the level of HVTRI (8 V to 16 V) is generated.

HVTRC=0

→ The charge current output is '0' regardless of the level of HVTRI.

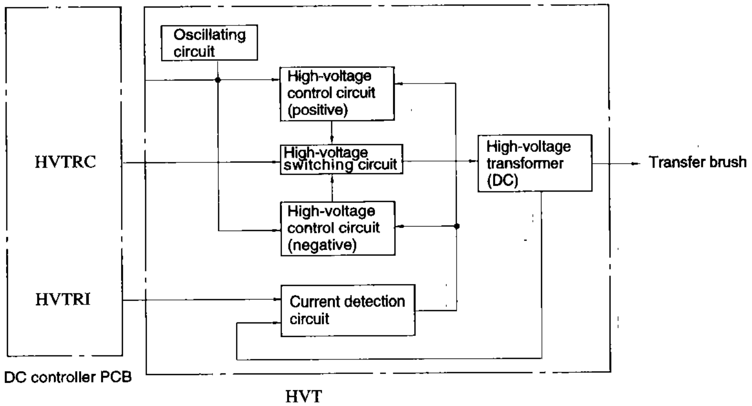

Oscillating circuit
High-voltage control circuit (positive)
HVTRC
High-voltage switching circuit
High-voltage transformer (DC)
Transfer brush
High-voltage control circuit (negative)
HVTRI
Current detection circuit
DC controller PCB
HVT

Figure 3-523

I. Controlling the Separation Charge Current

1. Outline

Figure 3-524 is a block diagram of the separation corona charging assembly control circuit.

The circuit is controlled by the separation charge on/off control signal (HVSPC) and separation charge level control signal (HVSPI) from the DC controller PCB.

The DC controller PCB generates HVSPI of an appropriate level to suit the type of copy paper (plain, thick paper, transparency) and the temperature and humidity registered by the environment sensor. The circuit controls the charge current (DC bias component) to a constant current level; it also controls the charge voltage (AC component) to a specific voltage level.

2. Operation

HVSPC=1

→ High voltage according to the level of HVSPI (8 V to 16 V) is generated.

HVSPC=0

→ The high-voltage output is '0' regardless of the level of HVSPI.

Reference:

Stray toner occurring as a result of separation charges will not be a problem in a high-humidity environment and, therefore, the corona output is controlled so that it is '0'.

At time of shipment, the machine is adjusted so that it identifies a high-humidity condition at '8.5 g' or higher ('DISPLAY: ANALOG: BODY g' in service mode).

The separation corona output and the humidity slice level (machine inside humidity absolute value) may be varied in service mode (ADJUST: HV-SP, SP-OFST).

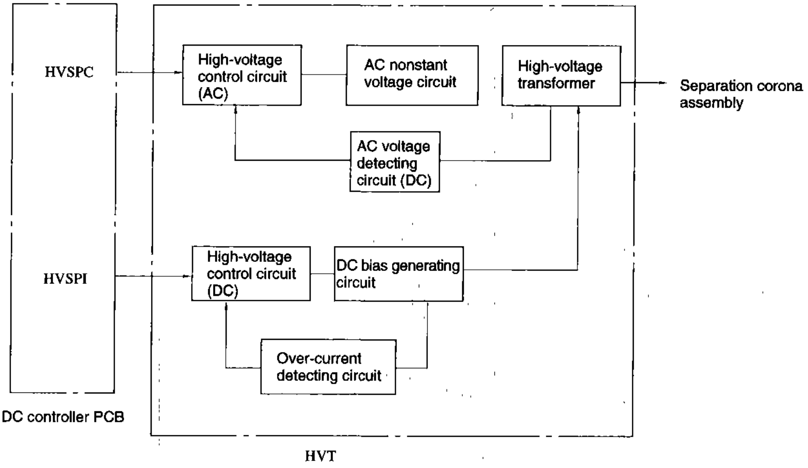

HVSPC
HVSPI
DC controller PCB
High-voltage control circuit (AC)
AC nonstant voltage circuit
High-voltage transformer
Separation corona assembly
AC voltage detecting circuit (DC)
High-voltage control circuit (DC)
DC bias generating circuit
Over-current detecting circuit
HVT

Figure 3-524

J. Controlling the Static Eliminator Current

1. Outline

Figure 3-525 is a block diagram of the static eliminator corona assembly control circuit.

The circuit controls the charge current of the external/internal static eliminator to a constant current level.

The circuit controls the internal static eliminator and external static eliminator separately based on the static eliminator charge on/off control signal (O-REM, I-REM) from the DC controller.

2. Operation

I-REM=1

→ The high voltage of the internal static eliminator is generated.

I-REM=0

→ The high voltage of the internal static eliminator is '0'.

O-REM=1

→ The high voltage of the external static eliminator is generated.

O-REM=0

→ The high-voltage of the external static eliminator is '0'.

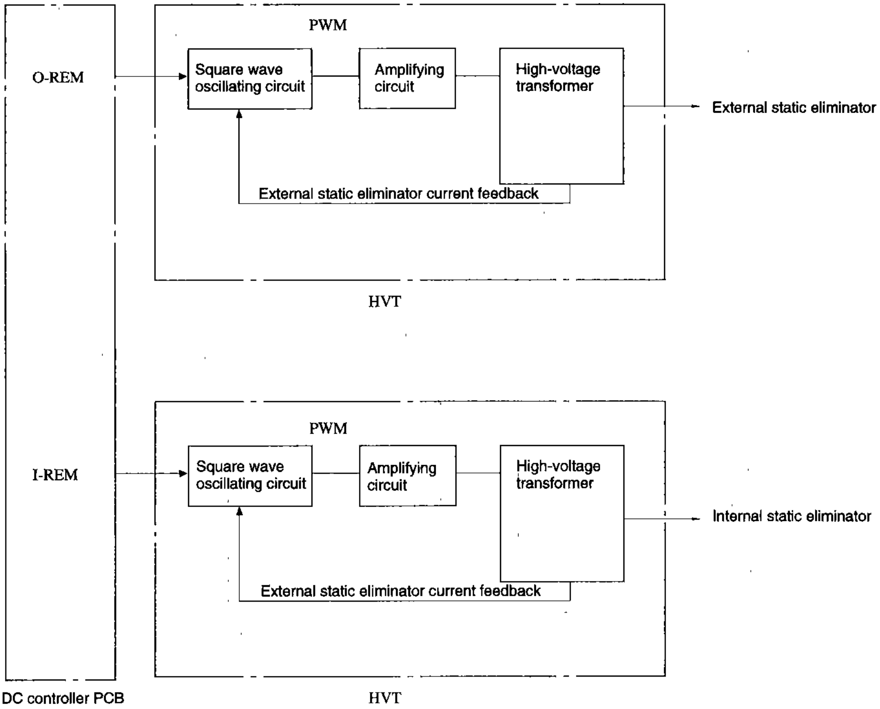

PWM
O-REM
Square wave oscillating circuit
Amplifying circuit
High-voltage transformer
External static eliminator
External static eliminator current feedback
HVT
PWM
I-REM
Square wave oscillating circuit
Amplifying circuit
High-voltage transformer
Internal static eliminator
External static eliminator current feedback
DC controller PCB
HVT

Figure 3-525

K. Controlling the Photosensitive Drum Temperature

1. Outline

The sensitivity of the photosensitive drum varies according to the site environment (temperature and humidity).

To prevent changes in the sensitivity of the drum, a drum heater (60 W) is installed along the drum axis to control the temperature around the drum to a specific value.

2. Control System

When the power saving switch (SW10) is at its normal position, the drum heater is supplied with power regardless of the position of the main switch; when the power saving switch is at the saving position, the drum heater is supplied with power only when the main switch is turned on. (See Figure 3-528.)

The temperature around the drum is monitored by the thermistor nearby, and communicated to the drum heater controller PCB. If the temperature around the drum is lower than a specific value, the drum heater is supplied with power through an SSR.

If the temperature rises to an error temperature, the control IC cuts off power to the drum heater.

Specific temperature ... 33°C (26°C)

High-temperature error temperature ... 50°C

To limit the consumption of power, the DC controller PCB generates the DRHOFF signal to cut out power to the drum heater through the SSR2 when another heater is on (115 V only).

If the DC controller identifies an error in the machine (fault in the fixing heater, for example), the SHUTOFF* signal turns off the main switch to cut out power to the drum heater.

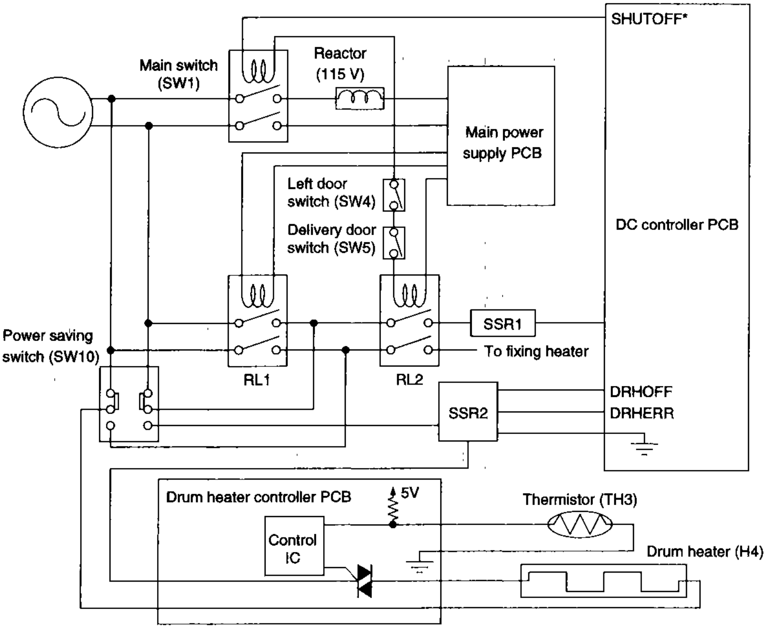

SHUTOFF*
Main switch (SW1)
Reactor (115 V)
Main power supply PCB
Left door switch (SW4)
Delivery door switch (SW5)
DC controller PCB
Power saving switch (SW10)
RL1
RL2
SSR1
To fixing heater
SSR2
DRHOFF
DRHERR
Drum heater controller PCB
5V
Control IC
Thermistor (TH3)
Drum heater (H4)

Figure 3-526

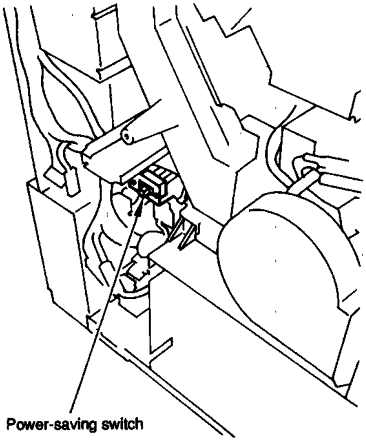

Power-saving switch

Figure 3-527

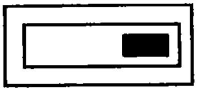

saving position
normal position

Figure 3-528 Power-Saving Switch (Rear View)

L. Controlling the Primary Corona Wire

1. Outline

The copier is equipped with an automatic cleaning mechanism for the primary corona wire which operates under the following conditions:

① When the DC controller identifies that the temperature of the fixing assembly is 130°C or less when the power is switched on.
② When primary corona wire cleaning is executed in user mode.
③ When image formation has been executed 2000 times on the photosensitive drum.

2. Operation

The primary corona wire cleaning motor (M7) is rotated in normal direction for about 12 sec; the cleaning felt is moved forward and butted against the rear.

After this normal rotation is over, the motor is rotated in reverse for about 12 sec; the cleaning felt moves in reverse and returns to the front.

The protection resistor is used to control overcurrent occurring when the cleaning felt butts against the front or rear.

Reference:

M7FW=1, M7RV=0
↳ Normal rotation
M7FW=0, M7RV=1
↳ Reverse rotation

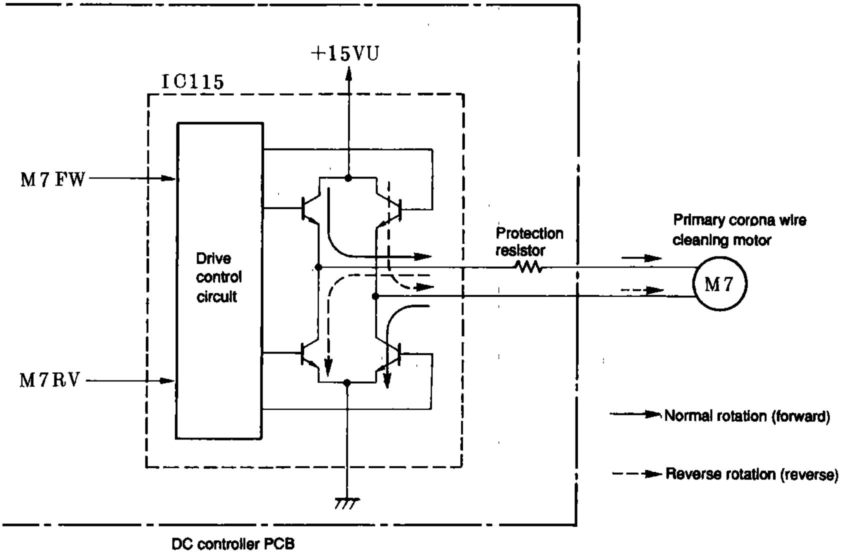

+15VU
IC115
M7FW
M7RV
Drive control circuit
Protection resistor
Primary corona wire cleaning motor
M7
Normal rotation (forward)
Reverse rotation (reverse)
DC controller PCB

Figure 3-529

M. Developing Assembly/Photosensitive Drum Cleaning Assembly

1. Outline

The developing assemblies for four colors are arranged around the photosensitive drum. Each of the developing assembly is engaged by the drive of the main motor transmitted by the developing assembly engagement solenoid (SL1 through SL4). The drive of the main motor is transmitted to the developing cylinder when the developing cylinder clutch (CL1 through CL4) turns on.

The density of toner inside the developing assembly is detected by the color toner density sensor (ATR1 through ATR3) and black toner density sensor (ATR4) when the developing assembly is engaged with the photosensitive drum.

When the toner density drops below the specified value, the toner supply clutch (CL5 through CL8) turns on to transmit the drive of the hopper motor to the hopper, thereby supplying toner.

The toner level sensor (TS1 through TS4) checks to see if the level of toner inside the hopper has dropped below the specified level.

The waste toner collected by the photosensitive drum cleaning assembly is forwarded to the waste toner container by the drive of the main motor. The waste toner pipe is equipped with a waste toner feed screw lock detection switch (MS4) and the waste toner container is equipped with a waste toner full sensor (PS42).

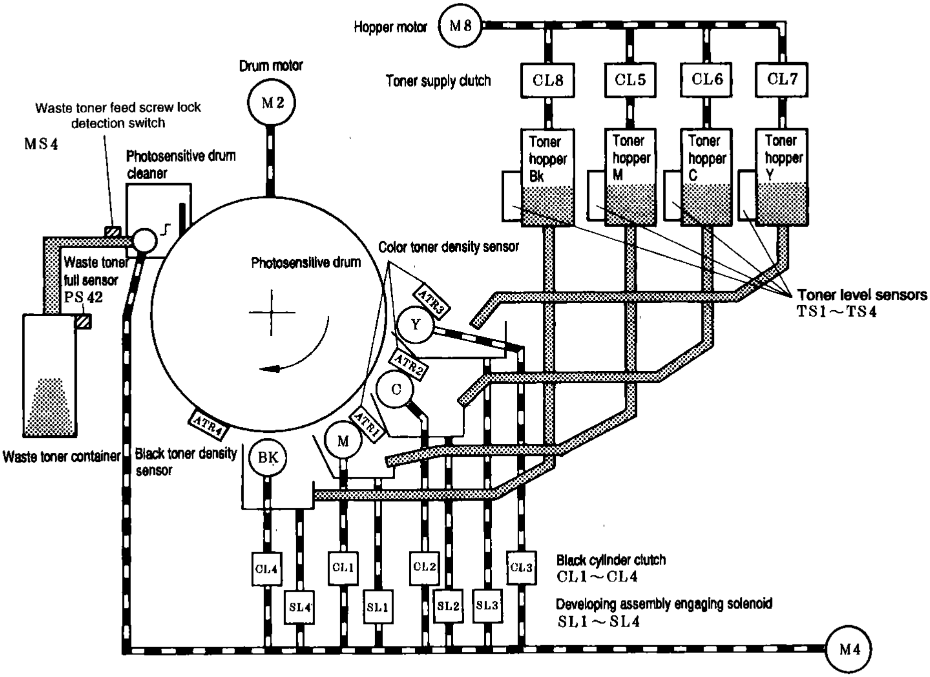

Hopper motor
M8
Drum motor
M2
Toner supply clutch
CL8
CL5
CL6
CL7
Toner hopper Bk
Toner hopper M
Toner hopper C
Toner hopper Y
Waste toner feed screw lock detection switch
MS4
Photosensitive drum cleaner
Waste toner full sensor
PS 42
Photosensitive drum
Color toner density sensor
ATR3
ATR2
ATR1
ATR4
Y
C
M
BK
Toner level sensors
TS1～TS4
Waste toner container
Black toner density sensor
CL4
CL1
CL2
CL3
SL4
SL1
SL2
SL3
Black cylinder clutch
CL1～CL4
Developing assembly engaging solenoid
SL1～SL4
M4

Figure 3-530

2. Developing Assembly Engagement

When the developing assembly engaging solenoid (SL1 through SL4) turns on, the developing assembly engaging cam rotates, and the developing assembly is engaged with the photosensitive drum by the drive of the main motor.

Figure 3-531 shows the state in which the cyan developing assembly is engaged.

In case of making a 4-color copy, the developing assemblies are engaged in the order of M, C, Y, and Bk.

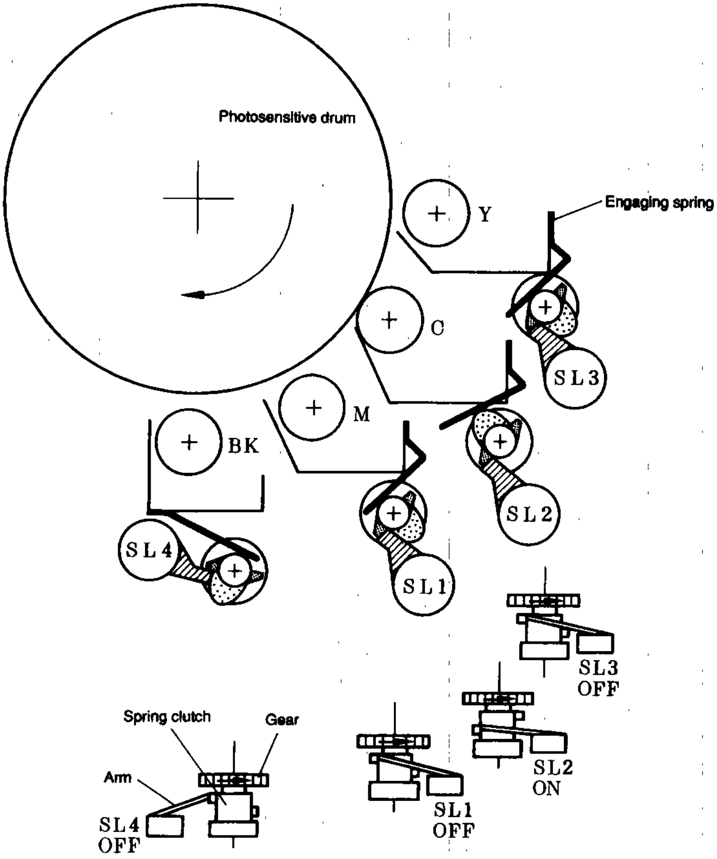

Photosensitive drum
Y
Engaging spring
C
SL3
M
BK
SL2
SL4
SL1
SL3
OFF
Spring clutch
Gear
Arm
SL2
ON
SL1
OFF
SL4
OFF

Figure 3-531 C Developing Assembly Engagement

3. Detecting the Color Toner Density

a. Outline

Each of the developing assemblies (M, C, and Y) is equipped with a single color toner density sensor, which checks the density of the developer inside any of the operating developing assembly during copying operation.

The sensors are of a photoelectric type, and detects the light (near infrared) reflected by the developing cylinder by a photodiode; toner is supplied according to the difference between the reading and the initial setting.

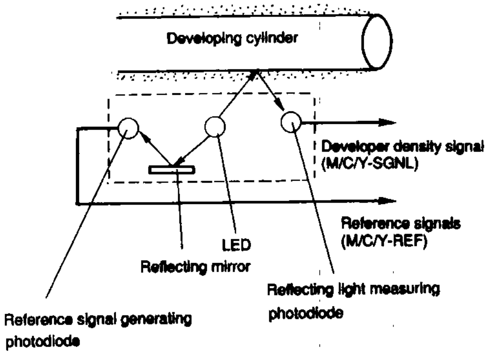

Developing cylinder
Developer density signal (M/C/Y-SGNL)
Reference signals (M/C/Y-REF)
LED
Reflecting mirror
Reflecting light measuring photodiode
Reference signal generating photodiode

Figure 3-532

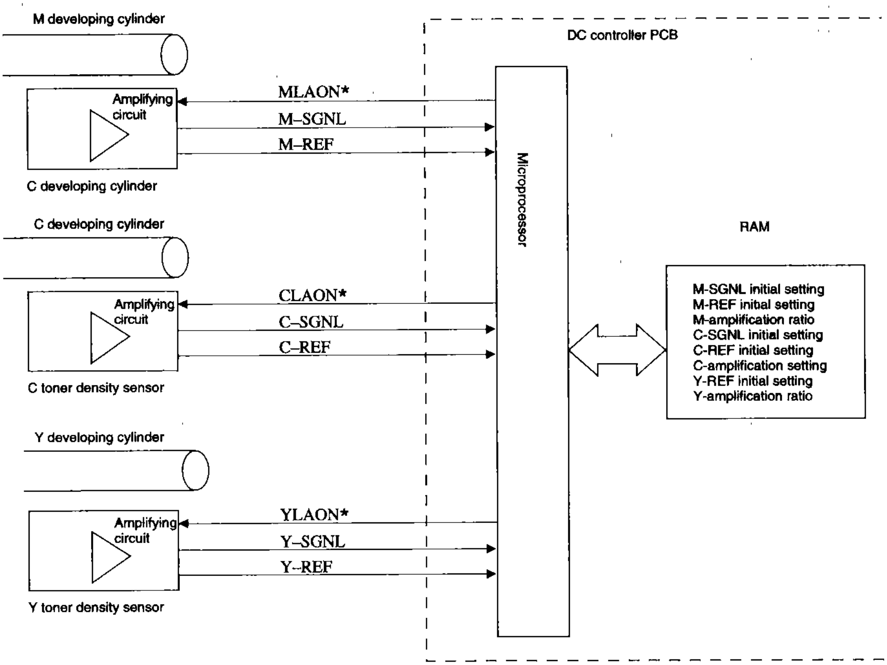

M developing cylinder
Amplifying circuit
MLAON*
M-SGNL
M-REF
C developing cylinder
C developing cylinder
Amplifying circuit
CLAON*
C-SGNL
C-REF
C toner density sensor
Y developing cylinder
Amplifying circuit
YLAON*
Y-SGNL
Y-REF
Y toner density sensor
DC controller PCB
Microprocessor
RAM
M-SGNL initial setting
M-REF initial setting
M-amplification ratio
C-SGNL initial setting
C-REF initial setting
C-amplification setting
Y-REF initial setting
Y-amplification ratio

Figure 3-533

Reference:

This mechanism of detection takes advantage of the fact that both paint and toner reflect infrared light but the carrier (iron powder) of the developer absorbs it. In other words, the infrared light reflected by the developer decreases as the toner inside the developer decreases.

In addition to the photodiode used to detect the density of toner, each sensor possesses a photodiode that generates reference signals used to detect the deterioration of the LED.

The copier's color toner density detection/adjustment is executed in response to a command in service mode after supplying the starter developer.

b. Initial Settings (FUNC, INSTALL, INIT-M/C/Y)

You must execute 'FUNCT', 'INSTALL,' and 'INIT-M/C/Y' at time of installation or whenever you have replaced the developer or the toner density sensor.

The copier's 'INIT-M/C/Y' automatically executes the following functions, which are executed by a hardware VR and in service mode in the existing models.

- reads the reference signal (REF-M/C/Y)
- sets the gain (SGAIN-M/C/Y)
- reads the initial developer density signal (SGNL-M/C/Y)
- writes the REF-M/C/Y, SGAIN-M/C/Y, and SGNL-M/C/Y values into RAM

c. Detecting the Density

A LED is turned on while the developing cylinder is rotating with the developing assembly engaged with the photosensitive drum. The microprocessor reads the toner density signal and reference signals, and compares them against the initial reading stored in RAM to compute the change that may have taken place in the density.

The copier determines the amount of toner to be fed based on this change in density, and supplies toner from the hopper.

See Table 3-503 for the names of the signals and the names used in service mode.

Signal	Adjustment	Notation in service mode
Y reference signal (Y-REF)	—	REF-Y
C reference signal (C-REF)	—	REF-C
M reference signal (M-REF)	—	REF-M
M toner density signal (M-SGNL)	818 ±41	SGNL-M
C toner density signal (C-SGNL)	818 ±41	SGNL-C
Y toner density signal (Y-SGNL)	818 ±41	SGNL-Y

Table 3-503

4. Measuring the Black Toner Density

a. Outline

The black toner density sensor is found outside the photosensitive drum, and is used to measure the density of the toner image of black (Bk) that has been developed on the photosensitive drum.

Like the color toner density sensor inside each of the developing assemblies (MCY), the black toner density sensor is of a photoelectric type, which detects the light reflected by the toner on the drum by a photodiode.

The copier also executes LED deterioration correction and window dirt correction to ensure accurate measurement of the toner density.

The copier's black toner density detection/adjustment is executed in response to a command in service mode after supplying the starter developer.

Reference:

> Each type of toner (MCY) reflects infrared light emitted by a LED; however, Bk toner absorbs infrared light.
> With reference to the reflection rate of the photosensitive drum, the following is true:
> Bk toner < photosensitive drum < MCY toner
> Taking advantage of such a characteristic, the copier measures the density of Bk toner on the drum.

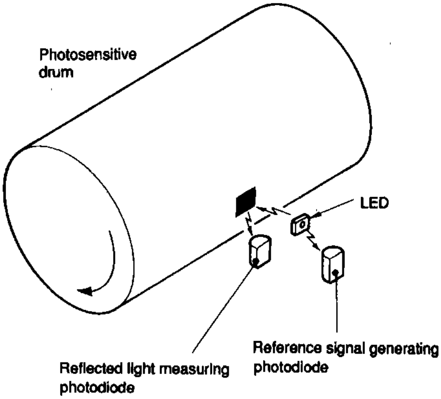

Photosensitive drum
LED
Reference signal generating photodiode
Reflected light measuring photodiode

Figure 3-534

b. Initial Settings (FUNC, INSTALL, INIT-K)

You must execute 'FUNCT', 'INSTALL,' and 'INIT-K' at time of installation or whenever you have replaced the developer or the toner density sensor.

The copier's 'INIT-K' automatically executes the following functions, which are executed by a hardware VR and in service mode in the existing models.

- reads the reference signal (REF-K/D)
- sets the gain (SGAIN-K, RGAIN-K)
- reads the initial developer density signal/drum surface density signal (SGNL-K/D)
- writes the REF-K/D, SGAIN-K, RGAIN-K, and SGNL-K/D values into RAM

c. Detecting the Density

A black toner image is developed on the photosensitive drum, and the LED of the Bk toner density sensor is turned on. The microprocessor reads the black toner density signal and reference signal and compares them against the initial settings stored in RAM to compute the change in the density.

Toner is supplied by the hopper according to the change so computed.

See Table 3-504 for the signal names and the names used in service mode.

Signal name	Standard	Name in service mode
Bk toner density signal (Bk-SGNL)	375 ± 35	SGNL-K
	614 ± 21	SGNL-D
Bk reference signal (Bk-REF)	818 ± 41	REF-K
	818 ± 41	REF-D

Table 3-504

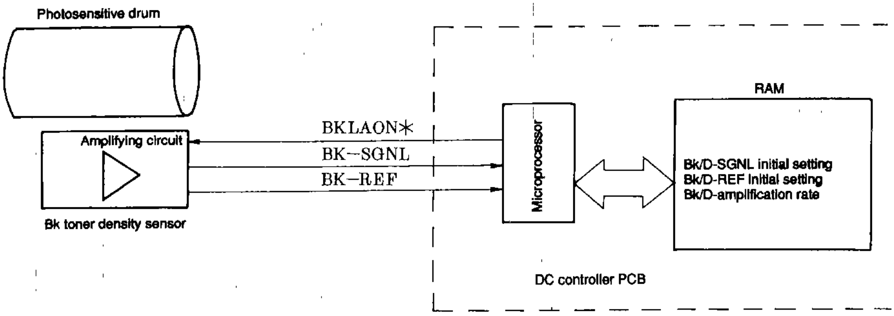

Photosensitive drum
Amplifying circuit
Bk toner density sensor
BKLAON*
BK−SGNL
BK−REF
Microprocessor
RAM
Bk/D-SGNL initial setting
Bk/D-REF initial setting
Bk/D-amplification rate
DC controller PCB

Figure 3-535

d. Detecting Dirt on the Window

At power-on and during control rotation (CNTR) that follows a press on the Copy Start key, a LED is turned on to measure Bk-SGNL without toner on the photosensitive drum; at this time, the value of Bk-SGNL is small if the sensor window is soiled. The ratio of the reading of Bk-SGNL and specified value is stored as a correction value, and is used to correct the sensor output for toner density control (inside black developing assembly).

If the measurement Bk-SGNL is 75% or less of the specified value, the copier indicates 'E020'.

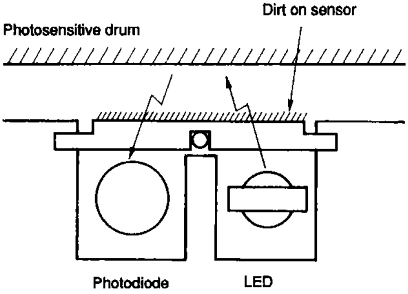


Figure 3-536

e. Controlling the Density of Toner Inside the Black Developing Assembly

When the black developing assembly is engaged with the photosensitive drum, the laser is turned on to form a black toner image on the photosensitive drum. A LED is turned on immediately before the black toner image moves past the front of the sensor, and the black toner density signal and reference signal are read while the image is moving past the sensor. These signals are compared against the window dirt correction value and the initial setting stored in RAM to obtain the change that may have occurred in density.

According to the change, the copier determines the amount of toner and supplies toner from the hopper.

Reference:

Unlike YMC toners, the copier's black toner absorbs near infrared light; for this reason, exposure of the developer with near infrared light will not enable detection of the amount of toner in the developer.

Since the photosensitive drum reflects near infrared, however, exposure of the black toner image on the drum enables detection of the density of the toner.

In other words, a decrease in the amount of toner in the developer results in a decrease in the density of the black toner image, thereby increasing the reflected light.

Reference:

It is important to prevent adhesion of toner from the photosensitive drum to the transfer sheet when the density of black toner is detected during copying operation; to do so, the DC controller PCB must turn on the laser when the black toner image comes into contact with the metal transfer sheet for transfer to the transfer drum.

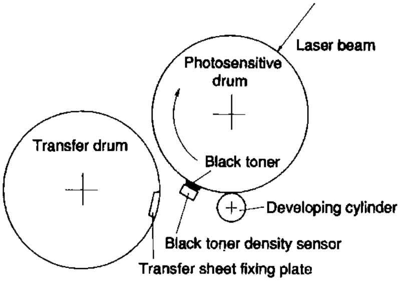


Figure 3-537

5. Error Code (E020) Associated with Controlling the Toner Density

1. E020

'E020' is an error code associated with toner density faults (ATR control).

ATR control may be used either when making initial settings at time of machine installation and developer replacement or when maintaining the toner density inside the developing assembly to a constant level as part of the copying sequence. In addition, control is executed differently between Bk toner and M/C/Y toner.

Here, the discussions are divided into ATR for Bk toner and ATR for M/C/Y toner, and 'E020' is explained together with detailed codes in relation to a series of operations.

a. Flow and Related Detailed Codes (initial setting for Bk developer)
b. Flow and Related Detailed Codes (initial setting for M/C/Y developer)
c. Bk – Related Flow and Detailed Codes at Power – On
d. Bk Toner Density Control Flow and Relate Detailed Codes during Copying Operation
e. M/C/Y Toner Density Control Flow and Related Detailed Codes during Copying Operation

a. Flow and Related Detailed Codes (initial setting for Bk developer)

Initial setting flow		Operation	Related detailed code		Error detection
1. Supplying developer (FUNC → INSTALL → SPLY-K)		Developer is put into the developing assembly.			
2. Stirring (FUNC → INSTALL → STIR)		The developer inside the developing assembly is stirred.			
3. Reading the initial setting (FUNC → INSTALL → INIT-K)	3.1 Idle rotation (30 sec)	The developer inside the developing assembly is stirred.			
	3.2 Determining SGAIN-K/ RGAIN-K	The LED on the BK toner sensor is turned on, and its direct light is detected by the photosensor 1 while its light reflected by the drum surface is detected by the photosensor 2 to convert the intensity into a voltage. Based on the measurement, SGAIN-K/ RGAIN-K is determined. • Sets the gain (RGAIN-K) so that the intensity detected by the photo-sensor 1 is 4 V. • Sets the gain (SGAIN-K) so that the intensity detected by the photo-sensor 2 is 3 V.	SG AIN-K	0432	SGAIN-K is 0.
				0442	SGAIN-K is 255.
				0450	GAIN cannot be set.
			RGAIN-K	0433	RGAIN-K is 0.
				0443	RGAIN-K is 255.
				0451	GAIN cannot be set.
	3.3 Reading SGNL-D/ REF-D	After determining GAIN, the LED is turned on once again; its direct light is detected by the photosensor 1 and converted into voltage based on the gain determined in 3-2 to obtain REF-D; then, the light reflected by the drum surface is converted into voltage based on the gain determined in 3-2 to obtain SGNL-D.	SGNL-D	0410	The variation within a single sampling is 102 or more.
				0420	The variation within 16 samplings is 102 or more.
			REF-D	0400	The value of REF-D is 50 or less; displaced connector, faulty sensor.
				0411	The variation within a single sampling is 102 or more
				0421	The variation within 16 samplings is 102 or more.
	3.4 Reading SGNL-K/ REF-K	A total of 16 halftone BK patches (8 x 2 rotations) are made on the photosensitive drum, and the LED is turned on while doing so; its direct light is detected by the photosensor 1 to obtain REF-K as in 3-3; then, the light reflected by a patch on the drum surface is detected by the photosensor 2 to obtain SGNL-K.	REF-K	0400	The value of REF-K is 50 or less; displaced connector, faulty sensor.
				0411	The variation of a single sampling is 102 or more.
				0421	The variation within 16 samplings is 102 or more.
	3.5 End (or re-measurement)	The flow is complete when the value of SGNL-K is 375 ±35. Otherwise, the Bk patch density level is changed and 3-4 is repeated. The density level is changed and measurements are taken for a maximum of two times; if SGNL-K is not 375 ±35 after a total of three tries, an error is issued. The change in the density level of the patches is based on PT-OFST (e.g., if PT-OFST=10, the image density is increased by 10 levels).		0431	The initial setting is 777 or less.
				0441	The initial setting is 859 or more.
			SGNL-K	0410	The variation within a single sampling is 102 or more.
				0420	The variation within 16 samplings is 102 or more.
				0430	The initial setting is 340 or less.
				0440	The initial setting is 410 or more.

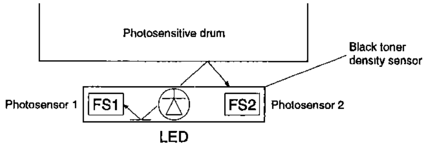


Figure 3-538

b. Flow and Related Detailed Codes (initial setting for M/C/Y developer)

XX indicates the color of the developing assembly (toner). xx = 01: M, xx = 02: C, xx = 03: Y

Initial setting flow		Operation	Related detailed code	Error detection
1. Supplies developer				
2. Stirs developer (FUNC -> INSTALL -> STIR)				
3. Reads initial settings (FUNCT -> INSTALL -> INTT - K)	3.1 Reads the reference signals "REF - M/C/Y".	Turns on the LED in each toner sensor, and the direct light is received by the Photosensor 1 to measure and convert the light into voltage. Takes 16 samplings, each sampling consisting of 10 measurements.	xx00	The connector is disconnected.
			xx11	The variation of 10 measurements within a single sampling is 41 or more.
			xx21	The variation in 16 samplings is 41 or more.
			xx31	The setting of "REF - M/C/Y" is 144 or less.
			xx41	The setting of "REF - M/C/Y" is 920 or more.
	3.2 Sets the gains "SGAIN - M/C/Y".	Sets the gain so that the voltage measured in 3.1 will be 4V.	xx32	The setting of "SGAIN - M/C/Y" is 0.
			xx42	The setting of "SGAIN - M/C/Y" is 255.
			xx50	The gain cannot be set.
	3.3 Reads the initial settings "SGNL - M/C/Y".	Turns on the LED in each toner sensor, and the light is directed to the developing cylinder; the reflected light is measured by the photosensor 2 and converted into voltage. (The value is "SGNL - M/C/Y".) Takes 10 samplings, each sampling consisting of 10 measurements.	xx10	The variation in the settings of "SGNL - M/C/Y" within a single sampling is 41 or more.
			xx20	The variation in the settings of "SGNL - M/C/Y" within 16 samplings is 41 or more.
			xx30	The setting of "SGNL - M/C/Y" is 777 or less.
			xx40	The setting of "SGNL - M/C/Y" is 859 or more.

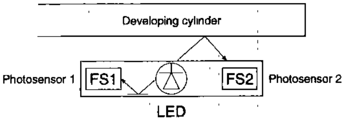


Figure 3-539

c. Bk - Related Flow and Detailed Cods at Power - On

	Initial setting flow	Operation	Related detailed code	Error detection
1.	Power switch on (starts initial multiple rotation)			
2. Checks soiling of window	2.1 Reads "SGNL - D".	Turns on the LED in the Bk toner sensor, and the direct light is received by the photosensor 2 to measure and convert the light into voltage.		
	2.2 Makes comparisons and computations.	Compares "SGNL-D" read in 2.1 against "SGNL - D" read in initial setting in 2.1 and stored in memory.	0460	There is a decrease in intensity of 40% or more when compared against "SGNL - D" read during initial setting.
			0470	There is an increase in intensity of 40% or more when compared against "SGNL - D" read during initial setting.

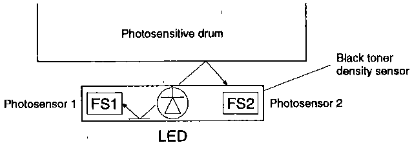


Figure 3-540

d. Bk Toner Density Control Flow and Relate Detailed Codes during Copying Operation

Initial setting flow		Operation	Related detailed code	Error detection
1. Copy Start key on (starts initial rotation)				
2. Checking the connector for disconnection			0400	The connector is disconnected.
3. Checks soiling on the window (during initial rotation.		Same as at power - on.	0460	Same as at power - on.
			0470	Same as at power - on.
4. Forms a Bk halftone patch on the photosensitive drum.		Forms a patch opposite the joint plate of the transfer drum.		
5. Measures the density	5.1 [REF - K] "SGNL - K".	Turns on the LED of the Bk toner density sensor to expose the photosensitive drum; the reflected light is received by the Photosensor 1, and its intensity is measured and converted to a voltage. Each sampling consists of 10 measurements, and a single sampling is taken.	04A1	The variation of "REF - K" within a single sampling is 102 or more.
	5.2 Makes comparisons and computations.	Compares "REF - K" read in 5.1 and "REF - K" read during initial setting and stored in memory.	04B1	"REF - K" read in 5.1 is lower than "REF - K" read in initial setting by 30% or more.
			04B1	"REF - K" read in 5.1 is higher than "REF - K" read in initial setting by 30%.
			0481	"REF - K" stored in memory is 777 or less.
			0491	"REF - K" stored in memory is 859 or more.
	5.3 Read "SGNL - K".	Turns on the LED in the Bk toner density sensor, and the light reflected by the patch on the photosensitive drum is measured by the photosensor 2 and converted into voltage. Takes a single sampling consisting of 10 measurements.	04A0	The variation in settings of "SGNL - K" within a single sampling is 102 or more.
			04B0	The setting of "SGNL - K" read is 102 or less.
			04C0	The setting of "SGNL - K" read is 550 or more.

	Initial setting flow	Operation	Related detailed code	Error detection
5. Measures the density	5.4 Makes comparisons and computations.	Compares "SGNL - K" read in 3.1 against "SGNL - K" read in initial setting and stored in memory to identify the density of toner inside the developing assembly.	0480	The setting of "SGNL - K" stored in memory is 163 or less.
			0490	The setting of "SGNL - K" stored in memory is 470 or more.
			04D0	A setting for "SGNL - K" which is –3.0% or less in relation on "SGNL - K" stored in memory has been detected 20 times or more continuously.
			04E0	A setting for "SGNL - K" which is +3.0% or more in relation to "SGNL - K" stored in memory has been detected 20 times or more continuously.

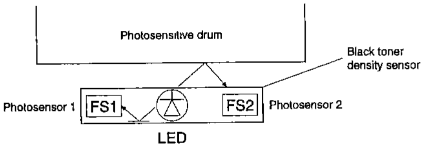

Photosensitive drum
Black toner density sensor
Photosensor 1
FS1
FS2
Photosensor 2
LED

Figure 3-541

e. M/C/Y Toner Density Control Flow and Related Detailed Codes during Copying Operation
XX indicates the color of the developing assembly (toner). xx = 01: M, xx = 02: C, xx = 03: Y

Initial setting flow		Operation	Related detailed code	Error detection
1. Copy Start key on (starts initial rotation).				
2. Checking the connector for disconnection.			xx00	The connector is disconnected.
3. Measures the density	3.1 Reads "REF - M/C/Y".	The LED of each toner sensor is turned on, and its direct light is detected by the photosensor 1 and converted into voltage. As many as 10 measurements are grouped as one sampling. (During this period, a single sampling is executed.)	xxA1	The variation in settings of "REF - M/C/Y" within a single sampling is 102 or more.
	3.2 Makes comparisons and computations.	Compares "REF - M/C/Y" read in 3.1 against "REF - M/C/Y" read in initial setting and stored in memory.	xxB1	The setting of "REF - M/C/Y" read in 3.1 is lower than the setting of "REF - M/C/Y" read in initial setting by 30% or more.
			xxC1	The setting of "REF - M/C/Y" read in 3.1 is higher than the setting of "REF - M/C/Y" read in initial setting by 30% or more.
			xx81	The setting of "REF - M/C/Y" stored in memory is 144 or less.
			xx91	The setting of "REF - M/C/Y" stored in memory is 920 or more.
	3.3 Reads "SGNL - M/C/Y".	Turns on the LED in each toner density sensor, the reflected light is received by the photosensor 2, and the intensity is measured and converted into voltage. Takes a single sampling consisting of 10 measurements.	xxA0	The variation in settings of "SGNL - M/C/Y" within a single sampling is 102 or more.
			xxB0	The setting of "SGNL - M/C/Y" read is 306 or less.
			xxC0	The setting of "SGNL - M/C/Y" read is 1013 or more.
	3.4 Makes comparisons and computations.	Compares "SGNL - M/C/Y" read in 3.3 against "SGNL -M/C/Y" read in initial setting and stored in memory to identify the density of toner inside the developing assembly.	xx80	The setting of "SGNL - M/C/Y" stored in memory is 777 or less.
			xx90	The setting of "SGNL - M/C/Y" stored in memory is 859 or more.
			xxD0	A setting for "SGNL - M/C/Y" which is −3.0% or less in relation to "SGNL - M/C/Y" stored in memory has been detected 20 times or more continuously.
			xxE0	A setting for "SGNL - M/C/Y" which is +3.0% or less in relation to "SGNL - M/C/Y" stored in memory has been identified 20 times or more continuously.

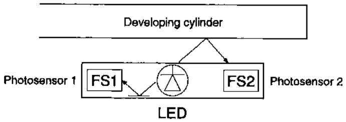


Figure 3-542

6. Supplying Toner

The copier has four hoppers, each for M, C, Y, and Bk. Figure 3-543 is a cross section of the C hopper.

If the density of toner inside any of the developing assembly is below the specified value, the toner supply clutch for that developing assembly turns on.

The activation of the toner supply clutch causes the drive of the main motor (M4) to be transmitted to the feeding screw, thereby supplying the developing assembly with toner.

This supply operation is executed when the developing assembly is at the point of development.

The period during which the clutch remains on differs depending on the toner supply amount determined by the toner density detecting circuit.

Each hopper is equipped with a toner sensor (piezoelectric oscillator); when the toner falls below a specific level, the ADD TONER message is indicated on the control panel after finishing the ongoing copying cycle.

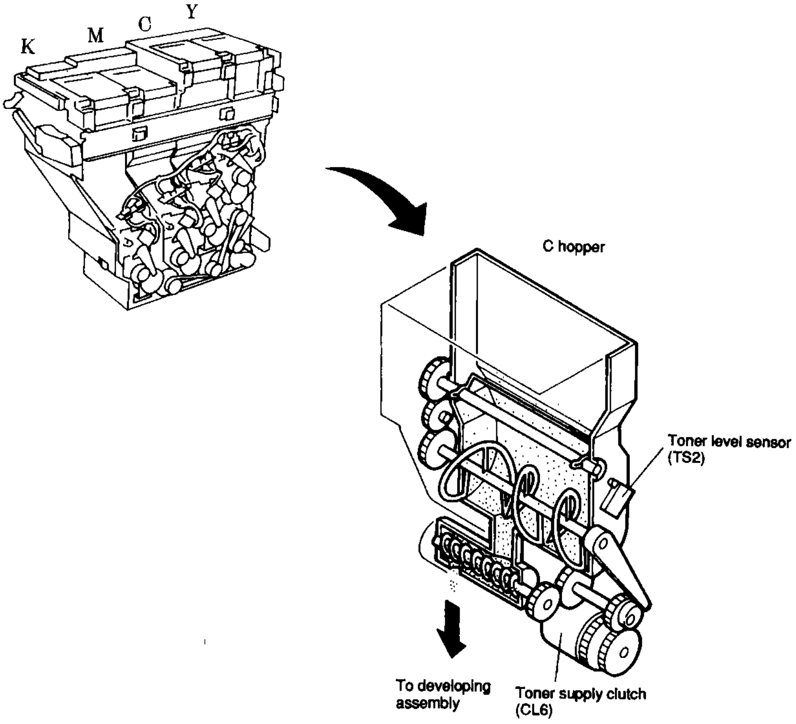


Figure 3-543

Table 3-505 shows the toner supply clutch and toner sensor intended for each developing assembly.

	M	C	Y	Bk
Toner supply clutch	CL5	CL6	CL7	CL8
Toner level sensor	TS1	TS2	TS3	TS4

Table 3-505

Reference:

The detecting unit of the toner sensor used in the hopper is a piezoelectric oscillator; it oscillates at several kHz in the absence of toner, causing the sensor output to be Low. In the presence of toner, the oscillation stops, causing the sensor output to be high.

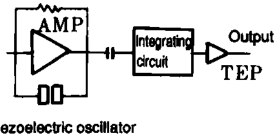


Figure 3-544

6. Photosensitive Drum Cleaning

a. Waste Toner Detection

The photosensitive drum cleaner is driven by the main motor (M4); the waste toner that has been scraped by the cleaning blade is forwarded to the waste toner container by a feeding screw for collection.

The level of waste toner is monitored by a waste toner sensor of a transmission type; when the level exceeds the specified level, the copier indicates the WASTE TONER message on the control panel.

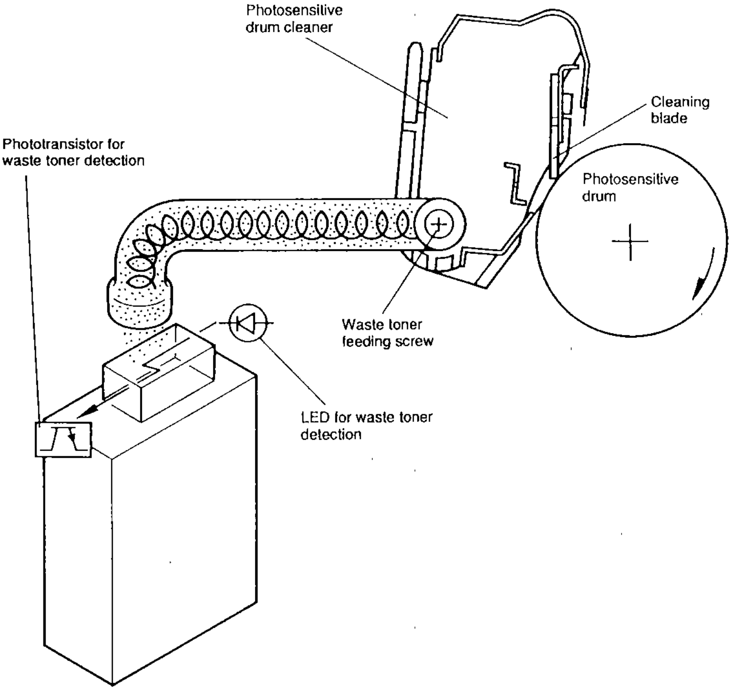

Photosensitive drum cleaner
Cleaning blade
Phototransistor for waste toner detection
Photosensitive drum
Waste toner feeding screw
LED for waste toner detection

Figure 3-545

VI. PICK-UP/FEEDING SYSTEM

A. Outline

The copier uses the center reference feeding system, in which copy paper moves through the center of the pick-up feeding path.

The pick-up system of the CLC800 consists of cassette 1 (small size), duplexing unit, cassette 3, cassette 4 (large size), and multifeeder.

The pick-up system of the CLC700, on the other hand, consists of cassette 1 (small size), cassette 2 (large size), and multifeeder.

Copy paper picked up from a cassette or the multifeeder is moved to the registration roller.

When the registration roller has rotated, the retention roller becomes engaged and the retention corona assembly turns on to wrap the copy paper around the transfer drum.

In this condition, the toner image on the photosensitive drum is transferred to the copy paper; the transfer drum rotates a maximum of four times with copy paper wrapped around it.

If the copy paper is of a small size (182 to 216 mm), two sheets are kept on the transfer drum at a time to increase the copying speed.

When transfer is over, the copy paper is moved through the separation, feeding, and fixing assemblies before delivery to the copy tray.

Figure 3-601 and -602 are outline diagrams of the feeding paths of the CLC800 and CLC700.

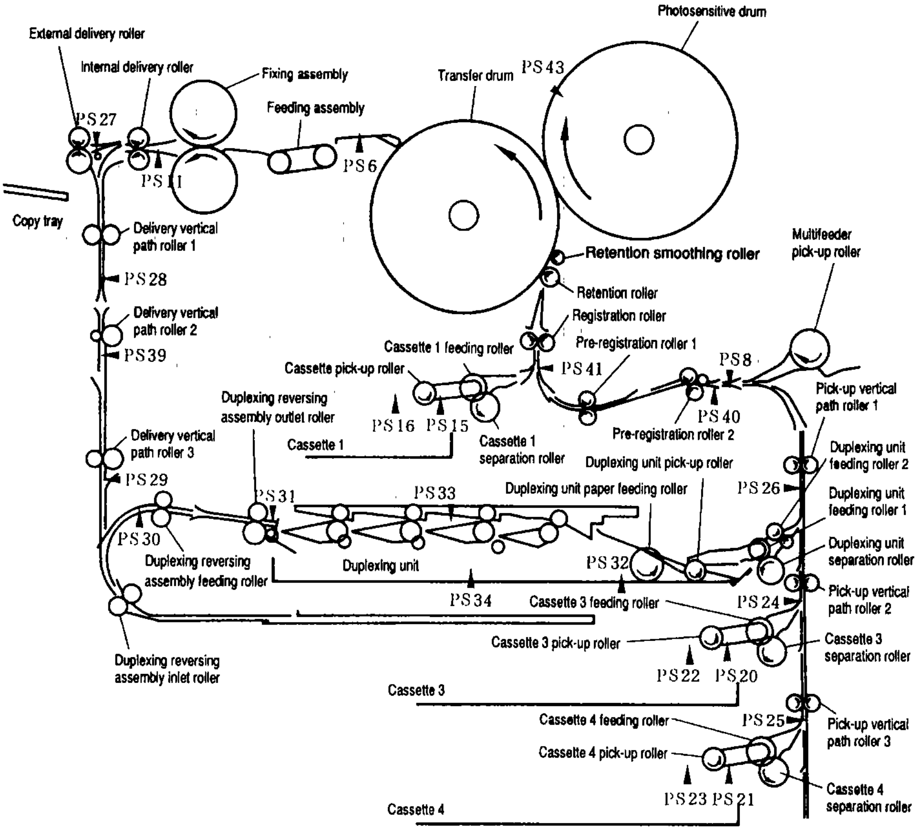

Photosensitive drum
External delivery roller
Internal delivery roller
Fixing assembly
Transfer drum
PS43
PS27
Feeding assembly
PS6
PS11
Copy tray
Delivery vertical path roller 1
Multifeeder pick-up roller
Retention smoothing roller
PS28
Retention roller
Delivery vertical path roller 2
Registration roller
PS39
Cassette 1 feeding roller
Pre-registration roller 1
Cassette pick-up roller
PS41
PS8
Duplexing reversing assembly outlet roller
Pick-up vertical path roller 1
PS16
PS15
PS40
Delivery vertical path roller 3
Cassette 1
Cassette 1 separation roller
Pre-registration roller 2
Duplexing unit feeding roller 2
Duplexing unit pick-up roller
PS29
PS31
PS33
Duplexing unit paper feeding roller
PS26
Duplexing unit feeding roller 1
PS30
Duplexing unit separation roller
Duplexing reversing assembly feeding roller
Duplexing unit
PS32
PS34
Cassette 3 feeding roller
PS24
Pick-up vertical path roller 2
Cassette 3 pick-up roller
Cassette 3 separation roller
Duplexing reversing assembly inlet roller
PS22
PS20
Cassette 3
Cassette 4 feeding roller
PS25
Pick-up vertical path roller 3
Cassette 4 pick-up roller
PS23
PS21
Cassette 4 separation roller
Cassette 4

Figure 3-601 CLC800

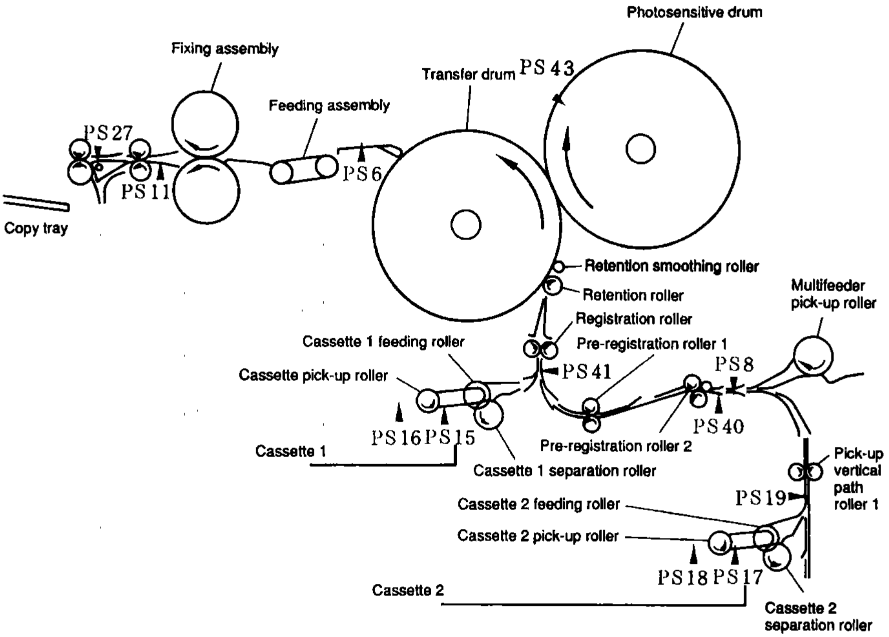

Photosensitive drum
Fixing assembly
Transfer drum
PS 43
Feeding assembly
PS27
PS11
PS6
Copy tray
Retention smoothing roller
Retention roller
Multifeeder pick-up roller
Registration roller
Cassette 1 feeding roller
Pre-registration roller 1
PS8
PS41
Cassette pick-up roller
PS40
PS16
PS15
Cassette 1
Pre-registration roller 2
Cassette 1 separation roller
Pick-up vertical path roller 1
Cassette 2 feeding roller
PS19
Cassette 2 pick-up roller
PS18
PS17
Cassette 2
Cassette 2 separation roller

Figure 3-602 CLC700

Notation	Name	Notation	Name
PS8	Multifeeder pick-up sensor	PS25 (CLC800)	Pick-up vertical path 3 sensor
PS11	Internal delivery sensor	PS26 (CLC800)	Pick-up vertical path 1B sensor
PS14	Multifeeder paper sensor	PS27	External delivery sensor
PS15	Cassette 1 lifter sensor	PS28 (CLC800)	Delivery vertical path 1 sensor
PS16	Cassette 1 paper sensor	PS29 (CLC800)	Duplexing pre-reversal paper sensor
PS17 (CLC700)	Cassette 2 lifter sensor	PS30 (CLC800)	Duplexing post-reversal paper sensor
PS18 (CLC700)	Cassette 2 paper sensor	PS31 (CLC800)	Duplexing reversing unit outlet sensor
PS19 (CLC700)	Pick-up vertical path 1A sensor	PS32 (CLC800)	Duplexing stacking assembly paper sensor
PS20 (CLC800)	Cassette 3 lifter sensor	PS33 (CLC800)	Duplexing feeding assembly paper sensor
PS21 (CLC800)	Cassette 4 lifter sensor	PS34 (CLC800)	Paper jogging guide home positions sensor
PS22 (CLC800)	Cassette 3 paper sensor	PS39 (CLC800)	Delivery vertical path 2 sensor
PS23 (CLC800)	Cassette 4 paper sensor	PS40	OHP sensor
PS24 (CLC800)	Pick-up vertical path 2 sensor	PS41	Registration paper sensor
		PS43	Pre-photosensitive drum cleanner paper sensor

Table 3-601

B. Pick-Up Assembly

1. Identifying the Size of Copy Paper

a. Outline

The size of the copy paper inside the cassette is checked by the paper size sensor attached to the rear of the cassette holder.

When a cassette is inserted into a cassette holder, the paper size sensors are pushed by the bosses on the cassette, enabling identification of the width and length of the paper. The copier identifies the size of the paper size based on the combination of width and length of the paper and, at the same time, determines when the scanner must be reversed and how the laser exposure range must be controlled.

The bosses on the cassette used to push the paper size operate in conjunction with the guide plate inside the cassette; changing the location of the guide plate to suit the paper size automatically determines the paper size identified by the copier. (See Figure 3-604.)

b. Identifying the Size of Copy Paper

The copy paper length sensor consists of two photointerrupters; the combination of the outputs of these two sensors makes identification of the length of paper possible.

On the other hand, the copy paper width sensor is a variable resistor, whose output resistance enables identification of the width of paper.

Figure 3-603 shows the relationship between paper widths and outputs of the variable resistor. The proportional relationship shown in the graph is stored in RAM on the DC controller PCB.

You must store the initial settings at the time you initialize the RAM on the DC controller whenever you have replaced the cassette, sensor, or DC controller. (See p. 3-278.)

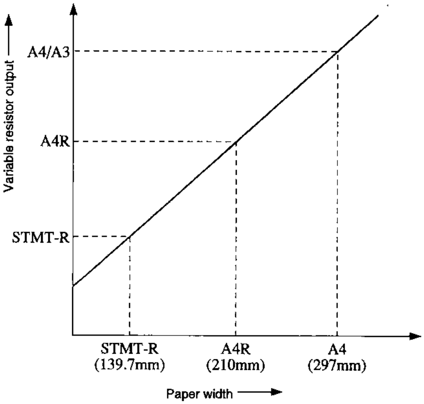
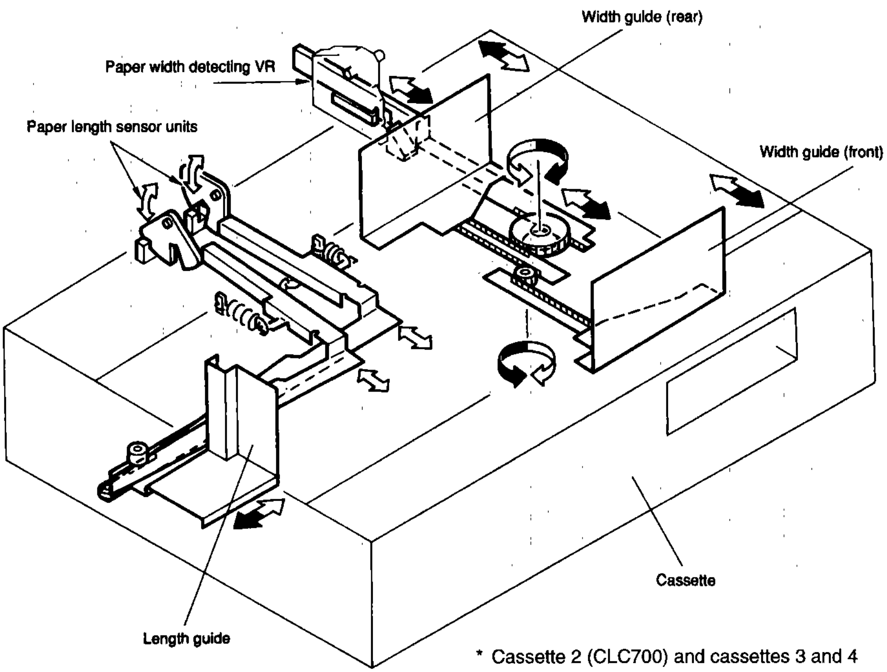


Figure 3-603


Width guide (rear)
Paper width detecting VR
Paper length sensor units
Width guide (front)
Cassette
Length guide

* Cassette 2 (CLC700) and cassettes 3 and 4 (CLC800) only.
Cassette 1 accommodates only a specific size of paper, and is not equipped with a paper length sensor unit.

Figure 3-604

c. Marking on the Width Guide Rail

The width guide rail found inside the cassette has holes used to determine paper size positions, and holes are identified with markings (A through M); see Table 3-602.

You may make use of these markings when making sure that the width guides are properly installed to suit the copy paper width in response to a call from the user noting skew movements of copy paper. (The markings are not made known to the user.)

Markings	Paper	Remarks
A	STMT-R	
B	A5-R	
C	B5-R	
D	KLGL-R	
E	GLTR-R	
F	G-LGL	G3
G	A4-R	
H	LGL/LTR-R	
I	FLSC	G2
J	B4/B5	
K	G-LTR	G1
L	11″ × 17″/LTR	G5
M	A3/A4	

(For G1 through G5, see Table 3-604.)

Table 3-602

d. Paper Size

The microprocessor on the DC controller determines the size of copy paper based on paper width/length input.

Paper width sensor slice level (in mm) \ Paper length sensor	PS101 PS103 PS105	PS102 PS104 PS106	PS101 PS103 PS105	PS102 PS104 PS106	PS101 PS103 PS105	PS102 PS104 PS106	PS101 PS103 PS105	PS102 PS104 PS106
Signal	SZ0	SZ1	SZ0	SZ1	SZ0	SZ1	SZ0	SZ1
ON/OFF	0	0	0	1	1	0	1	1
	A4		—		A3		—	
288.5	(G5)		—		11″ × 17″		—	
273.7	(G1)		—		—		—	
261.8	B5		—		B4		—	
238.0	STMT		LTRR		LGL		(G2)	
212.9	A5		A4R		—		(G3)	
206.6	G-LTRR		—		—			
196.6	K-LGLR		—		—		—	
186.0	B5R		—		—		—	
165.2	A5R		—		—		—	
144.1	STMTR		—		—		—	

Table 3-603

The sizes shown in Table 3-604 are specified in service mode for each group of paper sizes.

The asterisk (*) indicates the size specified at the factory.

Group	Size	
G1	*	G-LTR K-LGL
G2	*	FOOLSCAP OFFICIO E-OFFI A-LGL A-OFFI
G3	*	G-LGL FOLIO AUS-FLS
G5	*	LTR A-LTR

Table 3-604

e. Paper Sizes

Table 3-605 shows the sizes of copy paper that may be used in the CLC700 and CLC800.

The CLC700 uses cassette 1 (small size) and cassette 2 (large size).

The CLC800 uses cassette 1 (small size), duplexing unit, cassette 3, and cassette 4 (large size).

You may place only A4 or LTR paper in the small size cassette.

You may place all paper that may be accommodated by the copier in the large size cassette and multifeeder tray.

You may place transparency in any cassette, but you may place postcard (special), label sheet (special), or thick paper (106 to 163 g/m^2) only in the multifeeder.

Paper	Notation	Size (vertical × horizontal; in mm)
A3	A3	(297±1) × (420±1)
A4R	A4R	(210±1) × (297±1)
A4	A4	(297±1) × (210±1)
B4	B4	(257±1) × (364±1)
B5R	B5R	(182±1) × (257±1)
B5	B5	(257±1) × (182±1)
11″ × 17″	11×17	(279±1) × (432±1)
LETTER R	LTRR	(216±1) × (279±1)
LETTER	LTR	(279±1) × (216±1)
LEGAL	LGL	(216±1) × (356±1)

Table 3-605

f. Storing Paper Width Default Settings

See p. 3-278

2. Cassette Pick-Up Assembly

a. Operation

The pick-up assembly of the CLC800 and CLC700 has a construction shown in Figure 3-605 and -606.

The cassette is capable of accommodating as many as 500 sheets of copy paper (80 g/m^2).

The copy paper inside the cassette is lifted by the lifter, whereupon it comes into contact with the pick-up roller.

When the pick-up clutch turns on, the pick-up roller rotates to forward the copy paper; then, the pick-up roller solenoid turns on, and the pick-up roller moves away from the paper.

The paper then moves past the pick-up vertical path roller and pre-registration roller until it reaches the transfer drum by way of the registration roller.

See Table 3-606 for the notations of the pick-up clutch and pick-up roller solenoid of each of the cassettes used in the CLC800 and CLC700.

Cassette / Name	Multifeeder	Cassette 1	Cassette 2 (CLC700)	Cassette 3 (CLC800)	Cassette 4 (CLC800)	Duplexing unit (CLC800)
Pick-up clutch	CL12	CL13	CL14	CL16	CL17	CL19
Pick-up roller solenoid	SL15	SL16	SL17	SL18	SL19	SL21

Table 3-606

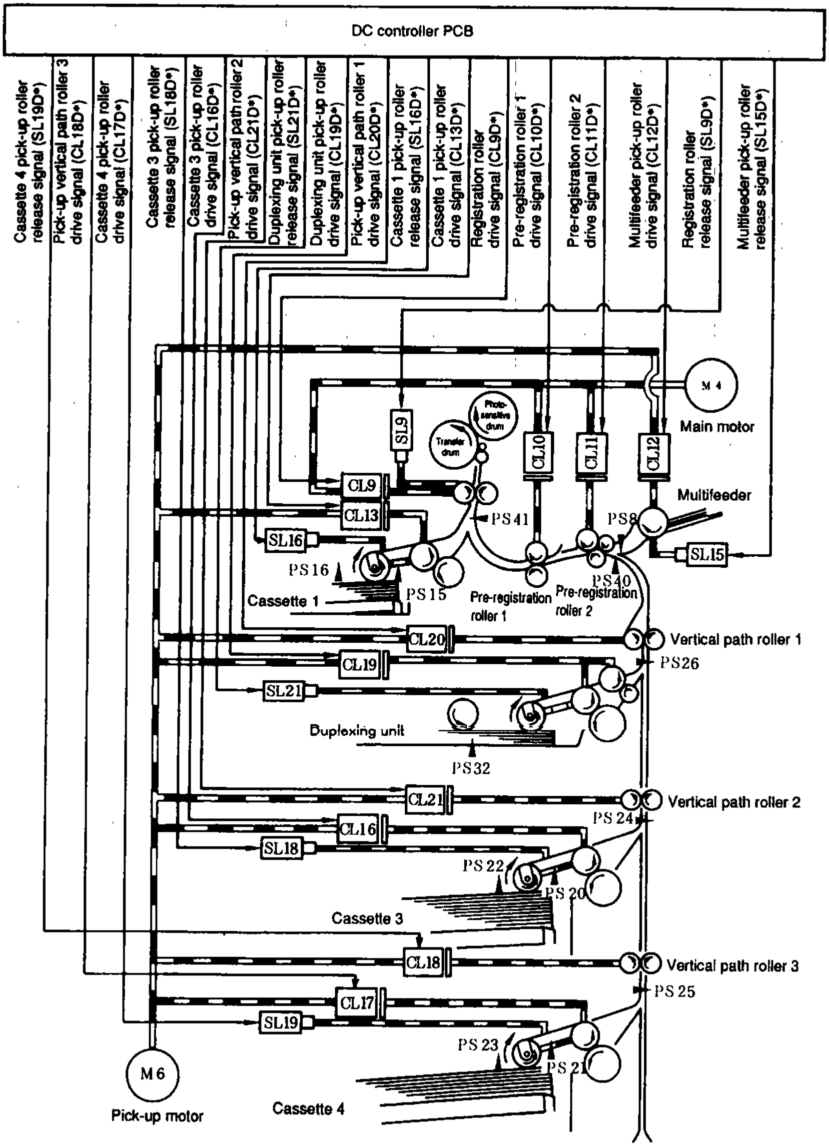

DC controller PCB
Cassette 4 pick-up roller release signal (SL19D*)
Pick-up vertical path roller 3 drive signal (CL18D*)
Cassette 4 pick-up roller drive signal (CL17D*)
Cassette 3 pick-up roller release signal (SL18D*)
Cassette 3 pick-up roller drive signal (CL16D*)
Pick-up vertical path roller 2 drive signal (CL21D*)
Duplexing unit pick-up roller release signal (SL21D*)
Duplexing unit pick-up roller drive signal (CL19D*)
Pick-up vertical path roller 1 drive signal (CL20D*)
Cassette 1 pick-up roller release signal (SL16D*)
Cassette 1 pick-up roller drive signal (CL13D*)
Registration roller drive signal (CL9D*)
Pre-registration roller 1 drive signal (CL10D*)
Pre-registration roller 2 drive signal (CL11D*)
Multifeeder pick-up roller drive signal (CL12D*)
Registration roller release signal (SL9D*)
Multifeeder pick-up roller release signal (SL15D*)
M4
Main motor
SL9
Photo-sensitive drum
Transfer drum
CL10
CL11
CL12
Multifeeder
CL9
CL13
PS41
PS8
SL16
SL15
PS16
PS40
Cassette 1
PS15
Pre-registration roller 1
Pre-registration roller 2
CL20
Vertical path roller 1
CL19
PS26
SL21
Duplexing unit
PS32
CL21
Vertical path roller 2
CL16
PS24
SL18
PS22
PS20
Cassette 3
CL18
Vertical path roller 3
CL17
PS25
SL19
PS23
PS21
M6
Pick-up motor
Cassette 4

Figure 3-605 CLC800 Pick-Up Assembly

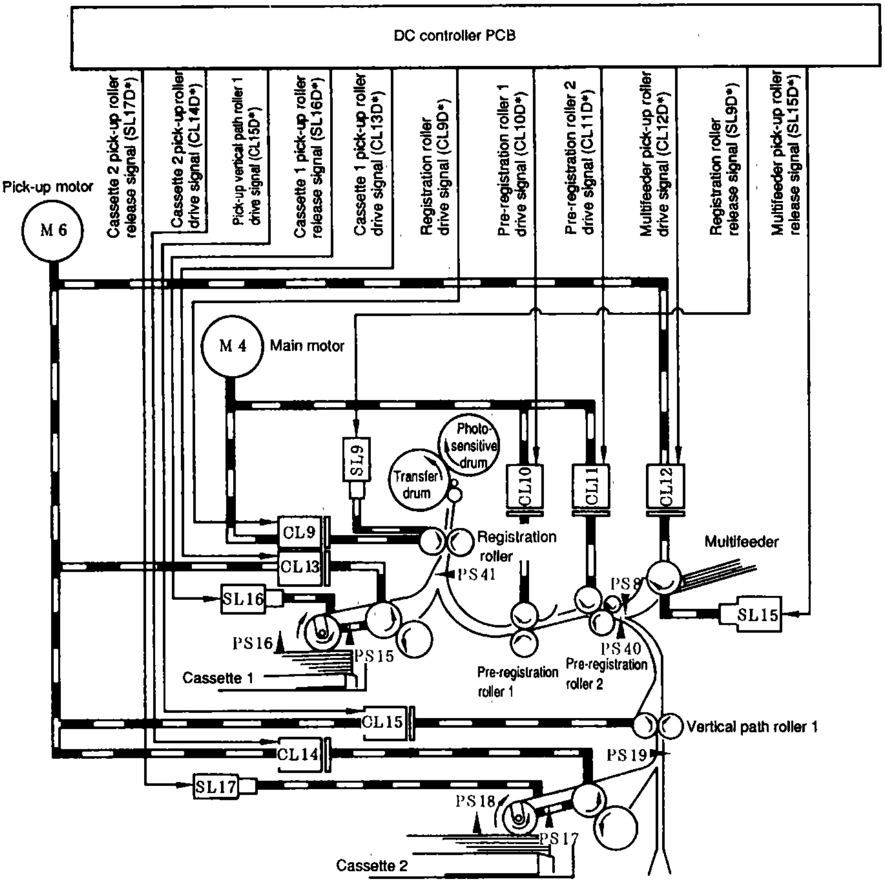

DC controller PCB
Pick-up motor
M 6
Cassette 2 pick-up roller release signal (SL17D*)
Cassette 2 pick-up roller drive signal (CL14D*)
Pick-up vertical path roller 1 drive signal (CL15D*)
Cassette 1 pick-up roller release signal (SL16D*)
Cassette 1 pick-up roller drive signal (CL13D*)
Registration roller drive signal (CL9D*)
Pre-registration roller 1 drive signal (CL10D*)
Pre-registration roller 2 drive signal (CL11D*)
Multifeeder pick-up roller drive signal (CL12D*)
Registration roller release signal (SL9D*)
Multifeeder pick-up roller release signal (SL15D*)
M 4
Main motor
Photo-sensitive drum
Transfer drum
SL9
CL10
CL11
CL12
CL9
CL13
Registration roller
PS41
Multifeeder
SL16
PS8
SL15
PS16
PS15
PS40
Cassette 1
Pre-registration roller 1
Pre-registration roller 2
CL15
Vertical path roller 1
CL14
PS19
SL17
PS18
PS17
Cassette 2

Figure 3-606 CLC700 Pick-Up Assembly

b. Cassette Lifter Operation

Figures 3-607 and -608 are outline diagrams of the cassette lifter operation.

When the cassette is inserted into the copier, the pick-up roller lowers, and the light-blocking plate leaves the lifter position sensor.

This condition causes the lifter motor to turn on, raising the lifter; then, the lifter motor stops where the lifter position sensor can detect the face of the stack of copy paper on the lifter.

When copy paper runs out and the paper detecting lever leaves the paper sensor, the copier indicates the Add Paper message on the control panel.

Table 3-607 shows the notations used for the lifter motor, lifter position sensor, and paper sensor as used for each of the cassettes in the copier.

Cassette / Notation	Cassette 1	Cassette 2 (CLC700)*	Cassette 3 (CLC800)	Cassette 4 (CLC800)
Lifter motor	M12	M13	M14	M15
Lifter position sensor	PS15	PS17	PS20	PS21
Paper sensor	PS16	PS18	PS22	PS23

*For the duplexing unit (CLC800), see p. 3-134.

Table 3-607

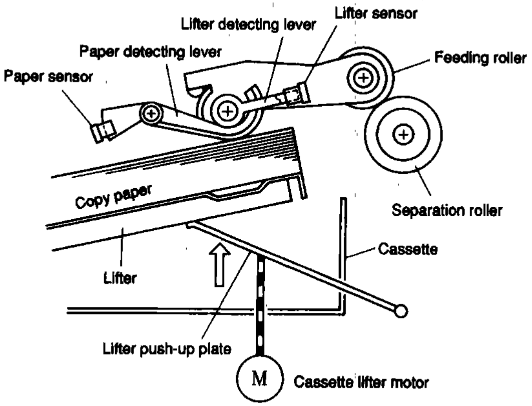

Lifter detecting lever
Lifter sensor
Paper detecting lever
Feeding roller
Paper sensor
Copy paper
Separation roller
Cassette
Lifter
Lifter push-up plate
M
Cassette lifter motor

Figure 3-607

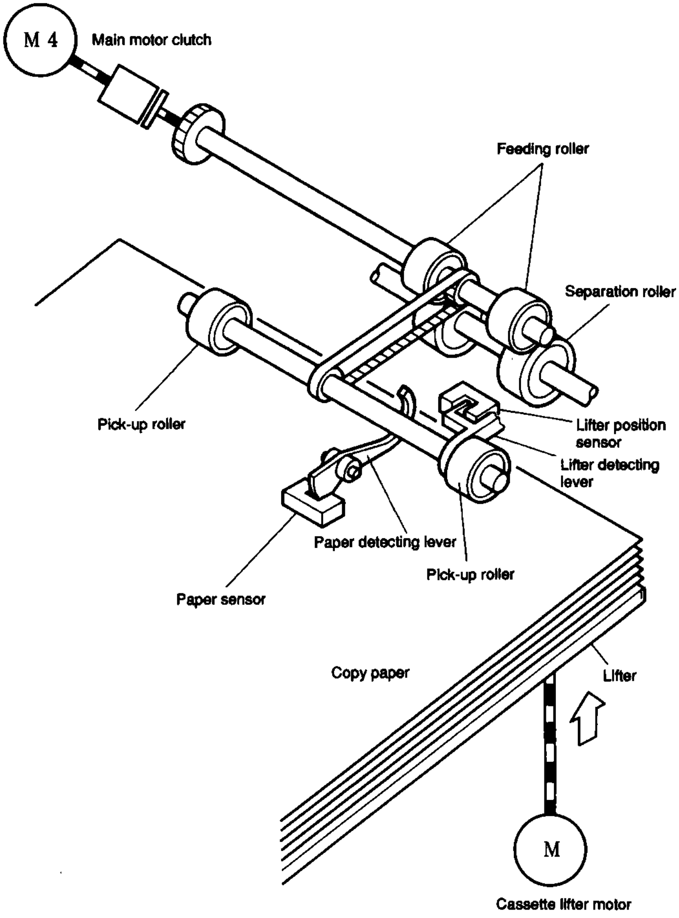

M 4
Main motor clutch
Feeding roller
Separation roller
Pick-up roller
Lifter position sensor
Lifter detecting lever
Paper detecting lever
Pick-up roller
Paper sensor
Copy paper
Lifter
M
Cassette lifter motor

Figure 3-608

c. Sequence of Pick-Up Operations

① Cassette 1, A4, 2 Copies Continuous, 4-Color, DIRECT

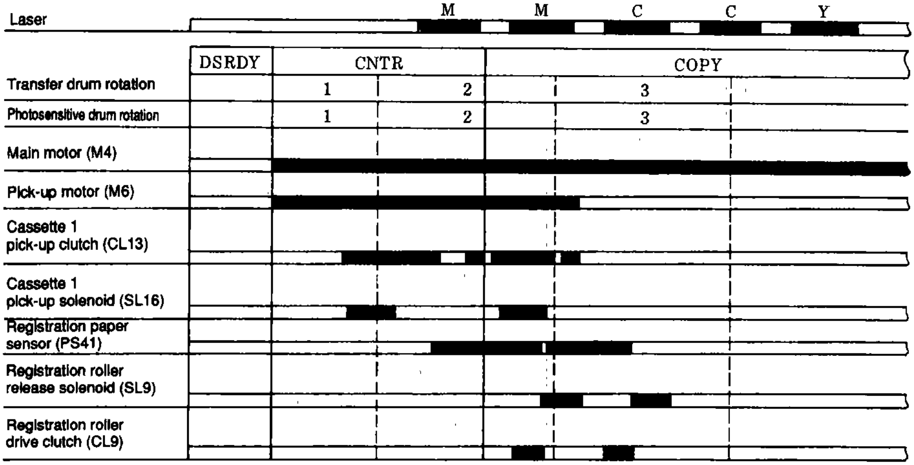

Laser
M
M
C
C
Y
DSRDY
CNTR
COPY
Transfer drum rotation
1
2
3
Photosensitive drum rotation
1
2
3
Main motor (M4)
Pick-up motor (M6)
Cassette 1
pick-up clutch (CL13)
Cassette 1
pick-up solenoid (SL16)
Registration paper
sensor (PS41)
Registration roller
release solenoid (SL9)
Registration roller
drive clutch (CL9)

Figure 3-609

② Cassette 3, A4, 2 Copies Continuous, 4-Color, DIRECT

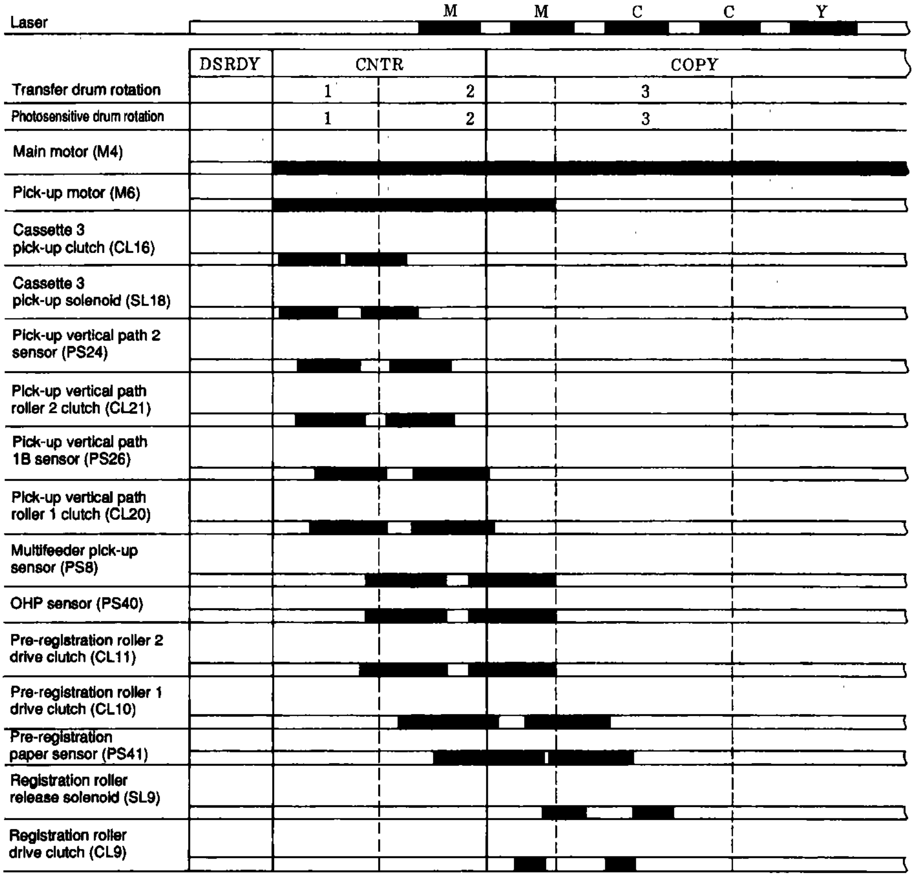

Laser
M
M
C
C
Y
DSRDY
CNTR
COPY
Transfer drum rotation
1
2
3
Photosensitive drum rotation
1
2
3
Main motor (M4)
Pick-up motor (M6)
Cassette 3 pick-up clutch (CL16)
Cassette 3 pick-up solenoid (SL18)
Pick-up vertical path 2 sensor (PS24)
Pick-up vertical path roller 2 clutch (CL21)
Pick-up vertical path 1B sensor (PS26)
Pick-up vertical path roller 1 clutch (CL20)
Multifeeder pick-up sensor (PS8)
OHP sensor (PS40)
Pre-registration roller 2 drive clutch (CL11)
Pre-registration roller 1 drive clutch (CL10)
Pre-registration paper sensor (PS41)
Registration roller release solenoid (SL9)
Registration roller drive clutch (CL9)

Figure 3-610

3. Multifeeder Pick-Up Assembly

a. Operation

The multifeeder pick-up assembly is constructed as shown in Figure 3-611.

The multifeeder is designed so that paper is picked up from its tray and is also capable of accommodating continuous feeding.

As many as 50 sheets of copy paper (80 g/m²) may be stacked on its tray.

The presence of copy paper on the tray is checked by the multifeeder paper sensor (PS14).

The copy paper stacked on the tray is butted against the pick-up roller by the paper guide plate.

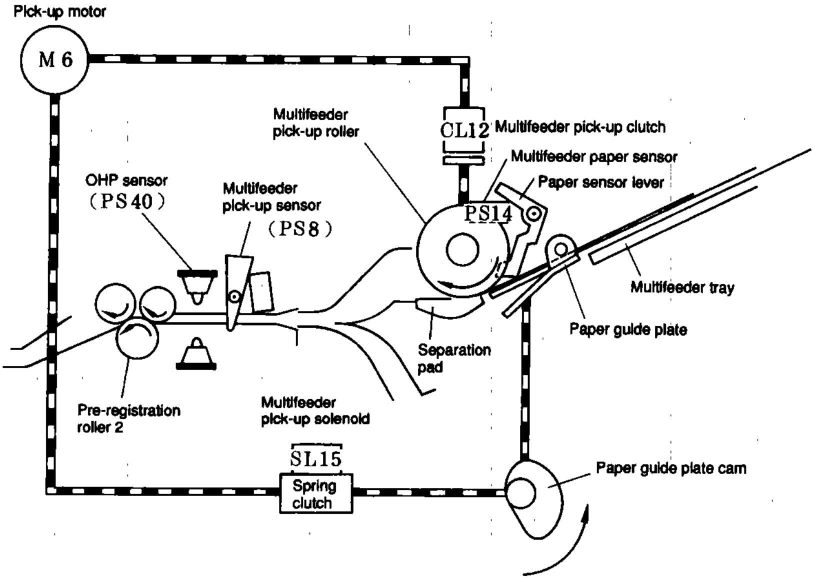
The pick-up roller starts to rotate when the drive of the pick-up motor (M6) is transmitted through a clutch.

Only one sheet of copy paper is forwarded by the work of the pick-up roller and the separation pad to the registration roller through the pre-registration roller.

The above series of operations is repeated for each pick-up.

Thick paper fed through the multifeeder is identified when the user select 'Thick Paper' on the touch panel.

For transparencies, see p. 3-133.



Pick-up motor
M 6
Multifeeder pick-up roller
CL12
Multifeeder pick-up clutch
Multifeeder paper sensor
Paper sensor lever
OHP sensor (PS40)
Multifeeder pick-up sensor (PS8)
PS14
Multifeeder tray
Paper guide plate
Separation pad
Pre-registration roller 2
Multifeeder pick-up solenoid
SL15
Spring clutch
Paper guide plate cam

Figure 3-611

b. Identifying the Size of Copy Paper in the Multifeeder

The paper width guide plate of the copier's multifeeder tray is equipped with a variable resistor; the width of paper is identified when the guide plate is butted against the edge of the stack of copy paper. (See Figure 3-612.)

In addition, the length of copy paper in manual mode is identified by the period of time during which the multifeeder pick-up sensor (PS8) remains on.

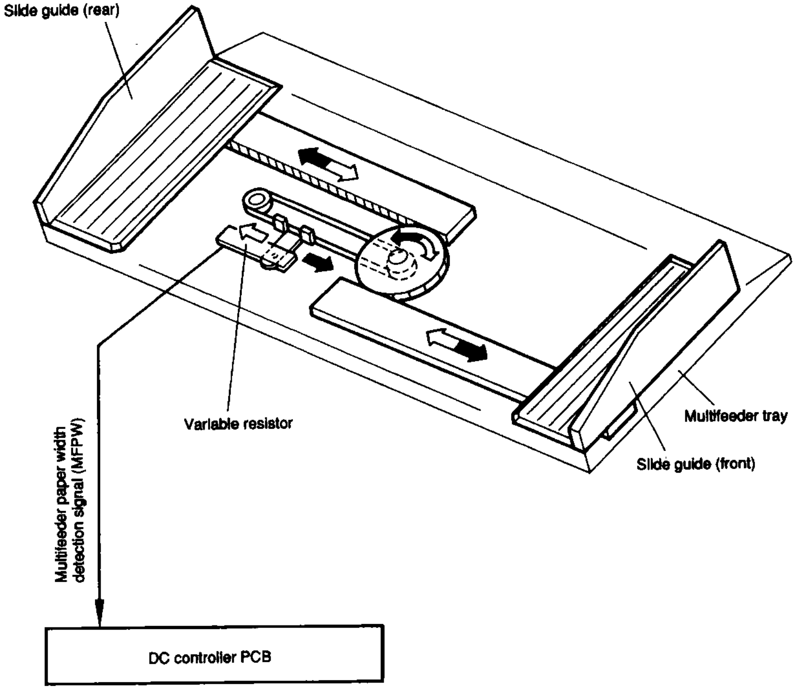
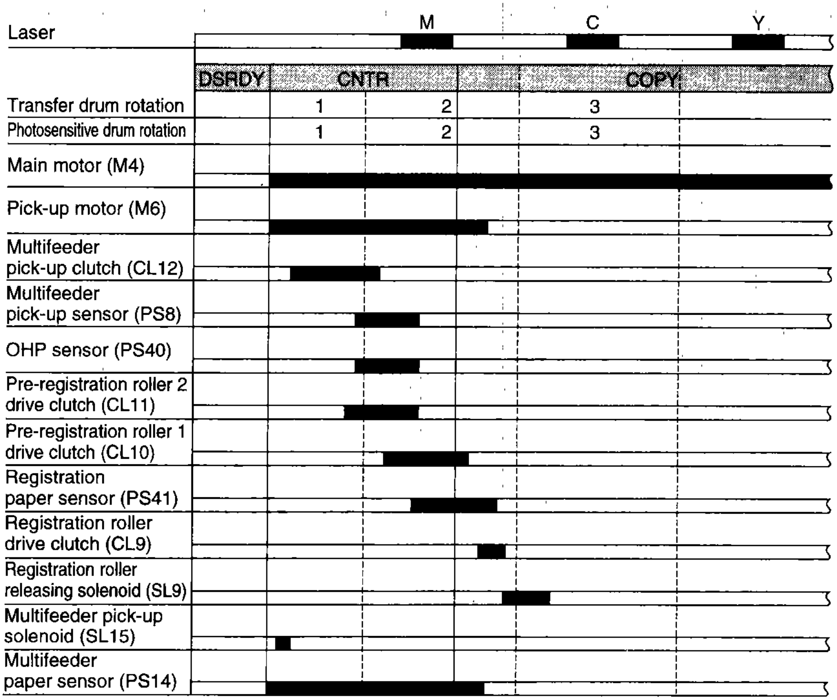

Slide guide (rear)
Variable resistor
Multifeeder tray
Slide guide (front)
Multifeeder paper width detection signal (MFPW)
DC controller PCB

Figure 3-612

c. Sequence of Pick-Up Operations

Multifeeder, A4, 4-Color, DIRCT



M
C
Y
Laser
DSRDY
CNTR
COPY
Transfer drum rotation
1
2
3
Photosensitive drum rotation
1
2
3
Main motor (M4)
Pick-up motor (M6)
Multifeeder pick-up clutch (CL12)
Multifeeder pick-up sensor (PS8)
OHP sensor (PS40)
Pre-registration roller 2 drive clutch (CL11)
Pre-registration roller 1 drive clutch (CL10)
Registration paper sensor (PS41)
Registration roller drive clutch (CL9)
Registration roller releasing solenoid (SL9)
Multifeeder pick-up solenoid (SL15)
Multifeeder paper sensor (PS14)

Figure 3-613

4. OHP Film Pick-Up

Like plain paper, you can place transparencies in the multifeeder, cassette 1, cassette 2, cassette 3, or cassette 4.

If transparencies are set in the multifeeder, cassette 2, cassette 3, or cassette 4, the OHP sensor (PS40) identifies whether the material is transparencies or otherwise.

If transparencies are stacked in cassette 1, the registration paper sensor (PS41) is used to identify whether the paper is a transparency or otherwise.

If the copier identifies the material as transparencies, it switches the speed of the fixing assembly.

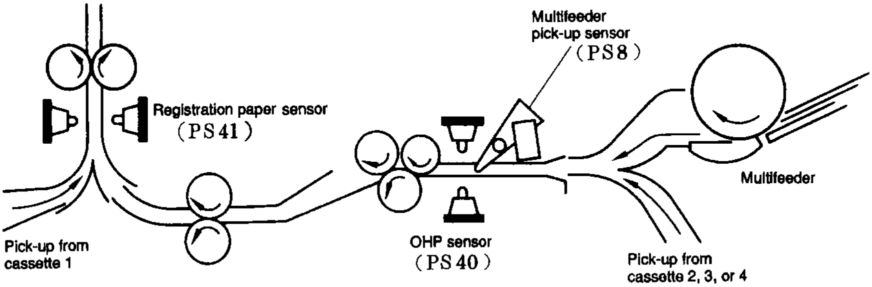

Multifeeder
pick-up sensor
(PS8)
Registration paper sensor
(PS41)
Multifeeder
Pick-up from
cassette 1
OHP sensor
(PS40)
Pick-up from
cassette 2, 3, or 4

Figure 3-614

Reference:

1. Advise the user to place one sheet of thick paper (to serve as backing paper) inside the cassette before stacking transparencies.
2. Advise the user to separate each transparency before stacking them in the cassette or the multifeeder.

C. Duplexing Unit

1. Outline

After the fixing process, copy paper picked up from the cassette or multifeeder is forwarded to the delivery vertical path assembly by the delivery paper deflecting plate; then, it is moved to the duplexing feeding assembly located inside the duplexing unit.

In the duplexing feeding assembly, the four paper deflecting plates form an appropriate path according to the length of the paper, and the paper is moved farther to the duplexing stacking assembly.

In addition, a duplexing stacking assembly heater is provided to prevent curling of copy paper.

Figures 3-615 and -616 show outline diagrams of the duplexing unit and its basic operations.

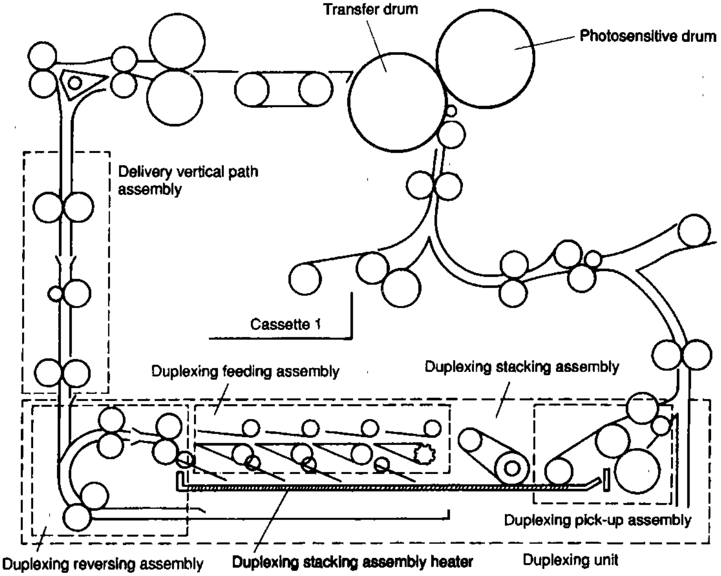

Transfer drum
Photosensitive drum
Delivery vertical path assembly
Cassette 1
Duplexing feeding assembly
Duplexing stacking assembly
Duplexing pick-up assembly
Duplexing reversing assembly
Duplexing stacking assembly heater
Duplexing unit

Figure 3-615

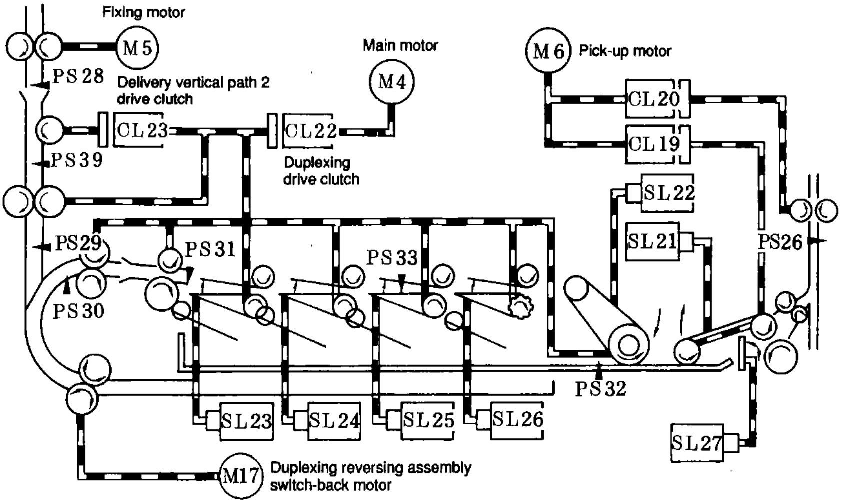

Fixing motor
M5
Main motor
M4
M6
Pick-up motor
PS28
Delivery vertical path 2 drive clutch
CL23
CL22
Duplexing drive clutch
CL20
CL19
SL22
SL21
PS39
PS29
PS31
PS33
PS26
PS30
PS32
SL23
SL24
SL25
SL26
SL27
M17
Duplexing reversing assembly switch-back motor

Figure 3-616

2. Stacking Two-Sided Copies

When making one two-sided copy, the copier's delivery deflecting plate shifts up to move paper as far as the duplexing reversing assembly.

Then, when the reversing roller rotates in reverse, the path formed by the deflecting sheet carries the copy paper to the duplexing unit feeding assembly, thereby reversing the copy paper.

The pick-up roller inside the duplexing unit rises, and the stopper plate shifts up, waiting for the copy paper.

When the copy paper reaches inside the duplexing unit stacking assembly, the feeding roller lowers to butt the copy paper against the stopper plate.

At this time, the copy paper is held in place by the pick-up roller; moreover, the curl pressing sheet or the curl pressing roller keeps the curl on the trailing edge of the copy paper down; see sections d and e.

When the last copy paper is stacked, the stopper plate shifts down, and the pick-up roller starts pick-up operation.

Figures 3-617 and -618 are outline diagrams of the stacking operation that takes place in the duplexing unit.

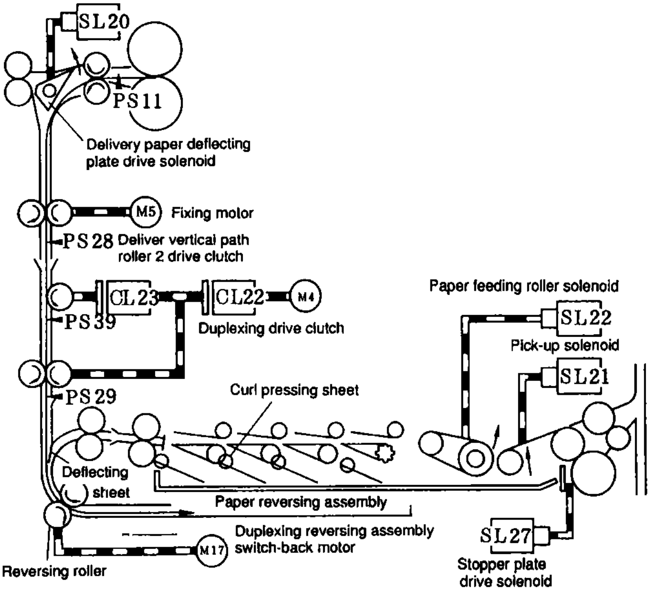

SL20
PS11
Delivery paper deflecting plate drive solenoid
M5
Fixing motor
PS 28
Deliver vertical path roller 2 drive clutch
CL23
CL22
M4
PS 39
Duplexing drive clutch
PS 29
Paper feeding roller solenoid
SL22
Pick-up solenoid
SL21
Curl pressing sheet
Deflecting sheet
Paper reversing assembly
Duplexing reversing assembly switch-back motor
M17
Reversing roller
SL27
Stopper plate drive solenoid

Figure 3-617

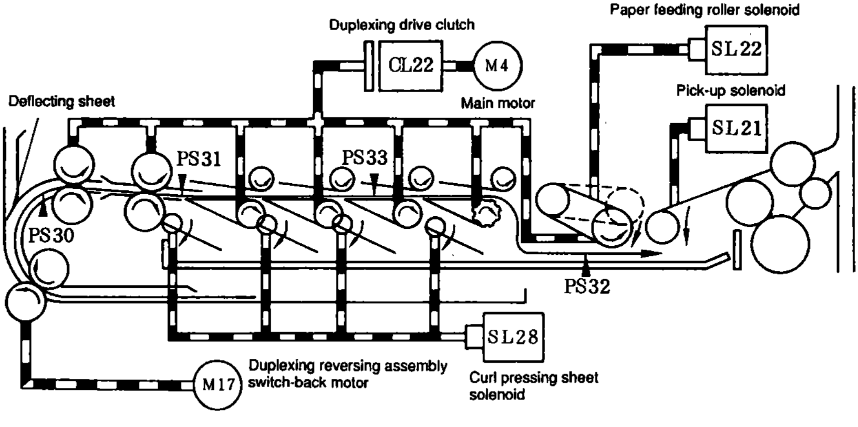

Paper feeding roller solenoid
Duplexing drive clutch
CL22
M4
SL22
Main motor
Pick-up solenoid
Deflecting sheet
SL21
PS31
PS33
PS30
PS32
SL28
Duplexing reversing assembly switch-back motor
M17
Curl pressing sheet solenoid

Figure 3-618

3. Changing the Paper Path in the Duplexing Feeding Assembly

The paper path in the duplexing feeding assembly is changed in two-sided copy mode to suit the size of copy paper.

As many as five different paths may be formed, each formed by four paper deflecting plate.

Each of the paper deflecting plate is driven by its respective solenoid.

Ref. No.	Paper length	Typical paper size	Paper deflecting plate drive solenoid			
			SL23	SL24	SL25	SL26
①	443.83 mm 390.57 mm	11″×17″ A3	ON	OFF	OFF	OFF
②	368.92 mm 315.66 mm	B4 LGL	OFF	ON	OFF	OFF
③	299.58 mm 246.32 mm	A4R LTR-R	OFF	OFF	ON	OFF
④	231.54 mm 178.28 mm	LTR A4 B5R	OFF	OFF	OFF	ON
⑤	163.50 mm 128.15 mm	B5	OFF	OFF	OFF	OFF

Table 3-608

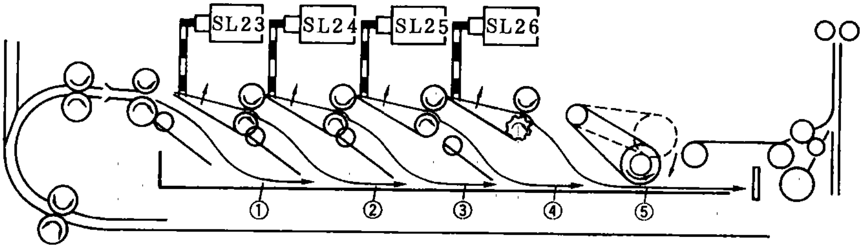


Figure 3-619

4. Curl Pressing Sheet

In the copier, curling of copy paper inside the duplexing unit could cause a stacking fault when sheets are stacked in two-sided copy mode.

To prevent such a fault, curl pressing sheets are used to hold down the trailing edge of copy paper, thereby ensuring proper stacking of the following paper.

Eight curl pressing sheets (2 × 4) are found inside the duplexing unit, and different pressing sheets are used according to the size of copy paper (see Figure 3-619; see the next section of ⑤); each time a sheet of copy paper arrives, all curl pressing sheets make a single rotation.

See Figure 3-620 for the sequence of operations.

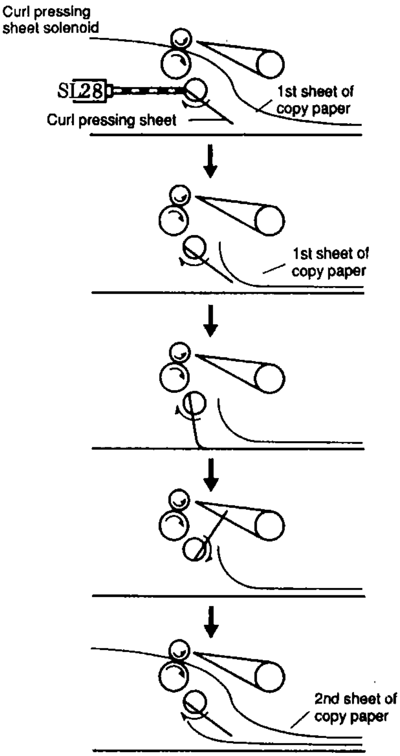

Curl pressing sheet solenoid
SL28
Curl pressing sheet
1st sheet of copy paper
1st sheet of copy paper
2nd sheet of copy paper

Figure 3-620

5. Stacking Operation in Path ⑤

If copy paper moves along path ⑤ (p. 3-138) and is stacked inside the duplexing unit, a curl pressing gear is used instead of a curl pressing sheet to hold down the trailing edge of the copy paper, ensuring the proper stacking of the next copy paper.

See Figure 3-621 for stacking operation that takes place in path ⑤.

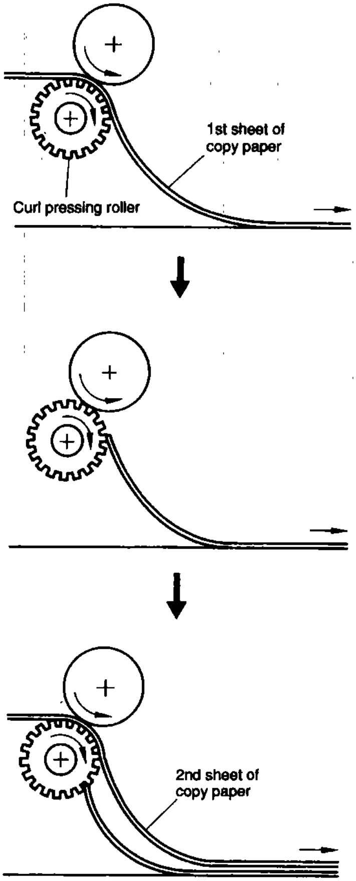

1st sheet of copy paper
Curl pressing roller
2nd sheet of copy paper

Figure 3-621

6. Paper Jogging Guide Plate

a. Outline

The paper jogging guide plate is used to keep the stack of copy paper in the duplexing stacking assembly in order, thereby preventing skew movements or jams at time of pick-up.

Each time a sheet of copy paper arrives, the paper jogging guide plate moves to come into contact with the edge of the paper.

b. Paper Jogging Operation

When the Copy Start key is pressed in two-sided copy mode, the duplexing stacking guide motor (M16) starts to move in reverse to move the paper jogging guide plate in the direction of the arrow shown in Figure 3-622.

The motor stops as soon as the light-blocking plate of the paper jogging guide plate blocks the guide home position sensor (PS34) of the duplexing stacking assembly.

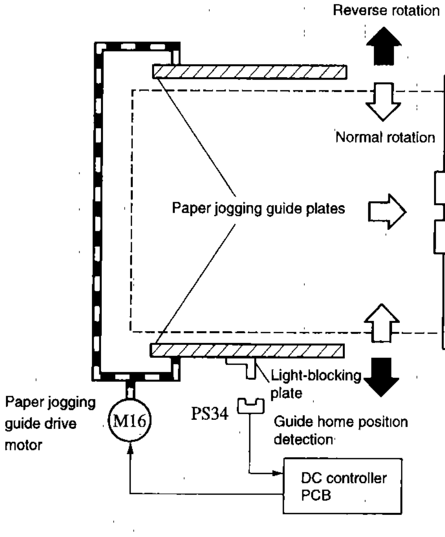
The DC controller PCB sends the number of pulses that corresponds to the size of the copy paper.

In response, the motor rotates in normal direction to move the paper jogging guide plate to a point that suits the size of the paper used. Next, the motor starts to rotate in reverse to move and stop the paper jogging guide plate at a point about 8 mm (one side) away from the width of the copy paper; the paper jogging guide waits for the copy paper at this point.

When the copy paper arrives in the duplexing unit stacking assembly, the motor rotates in normal direction to move the guide plate by 8 mm and then rotates in reverse to move the guide plate by 8 mm to put the paper in line.

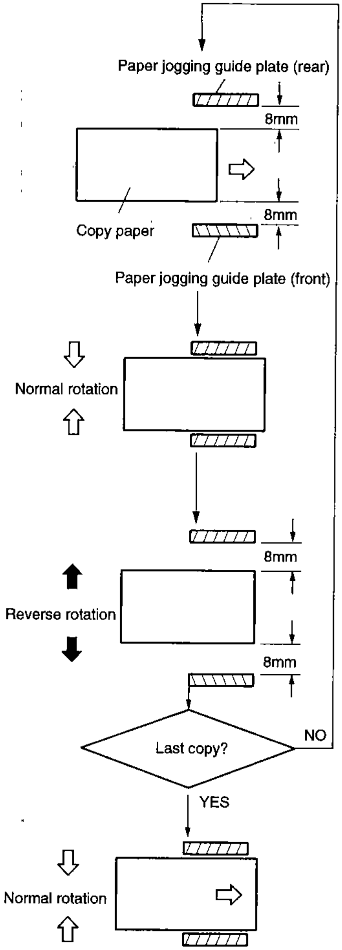
When the last copy paper arrives, the motor rotates in normal direction, in reverse, and in normal direction to be ready for copying on the second side.

The motor remains at rest during copying on the second side; it remains at rest until the next copying operation starts for the first side.



Reverse rotation
Normal rotation
Paper jogging guide plates
Light-blocking plate
Paper jogging guide drive motor
M16
PS34
Guide home position detection
DC controller PCB

Figure 3-622 Tray (top view)



Paper jogging guide plate (rear)
8mm
8mm
Copy paper
Paper jogging guide plate (front)
Normal rotation
Reverse rotation
8mm
8mm
Last copy?
NO
YES
Normal rotation

Figure 3-623 Paper Jogging Operation

c. Sequence of Copying Operations (two-sided, 1st side)

Two-Sided (1st side), A4, 2 Copies Continuous, 4-Color, DIRECT

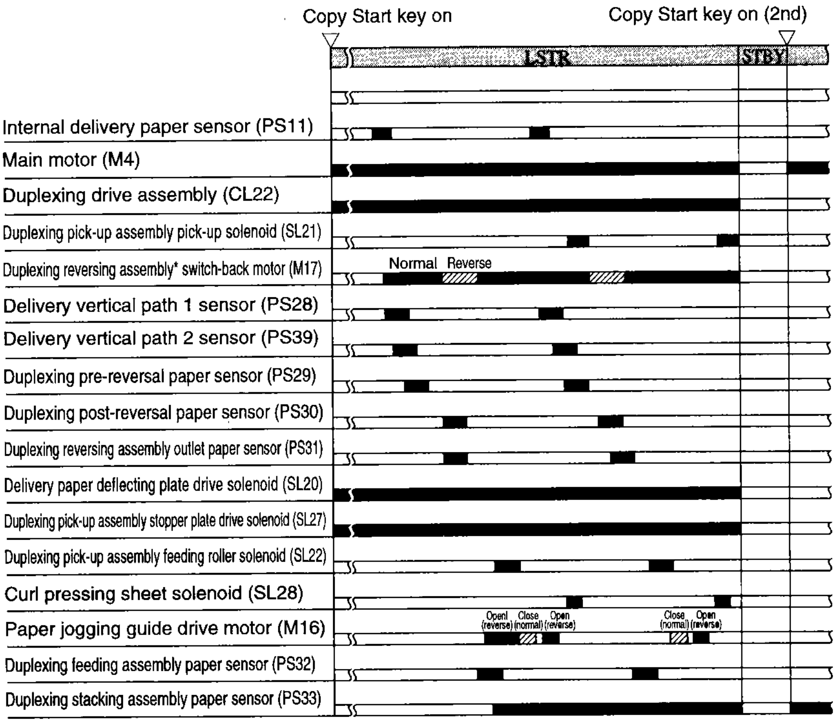


Figure 3-624

*1 A4 Paper
- Normal rotation .... high-speed control
- Reverse rotation ...... high-speed control

A3 Paper
- Normal rotation .... low-speed control (delivery vertical path 2 sensor detects paper)
- Normal rotation .... high-speed control (trailing edge of paper has moved past delivery vertical path 2 sensor)
- Reverse rotation ...... high-speed control

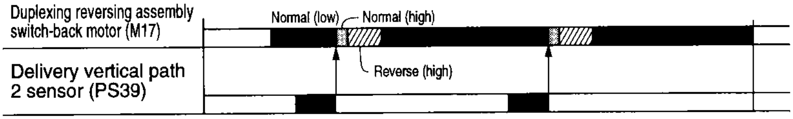


Figure 3-625

7. Pick-Up from the Duplexing Unit

a. Outline

When copying on the second side of a two-sided copy, the appropriate paper stacked inside the duplexing unit stacking assembly is picked up.

When the Copy Start key is pressed, the stopper plate shifts down, and the duplexing unit pick-up clutch (CL19) turns on, thereby transmitting the drive of the pick-up motor (M6) to the pick-up roller to pick up copy paper. After pick-up, the pick-up roller moves away from the paper by the action of the pick-up roller solenoid (SL21).

Then, one of the sheets of copy paper is moved to the vertical path assembly by the feeding roller and separation roller.

Figure 3-626 shows an outline of the pick-up operation that takes place in the duplexing unit.

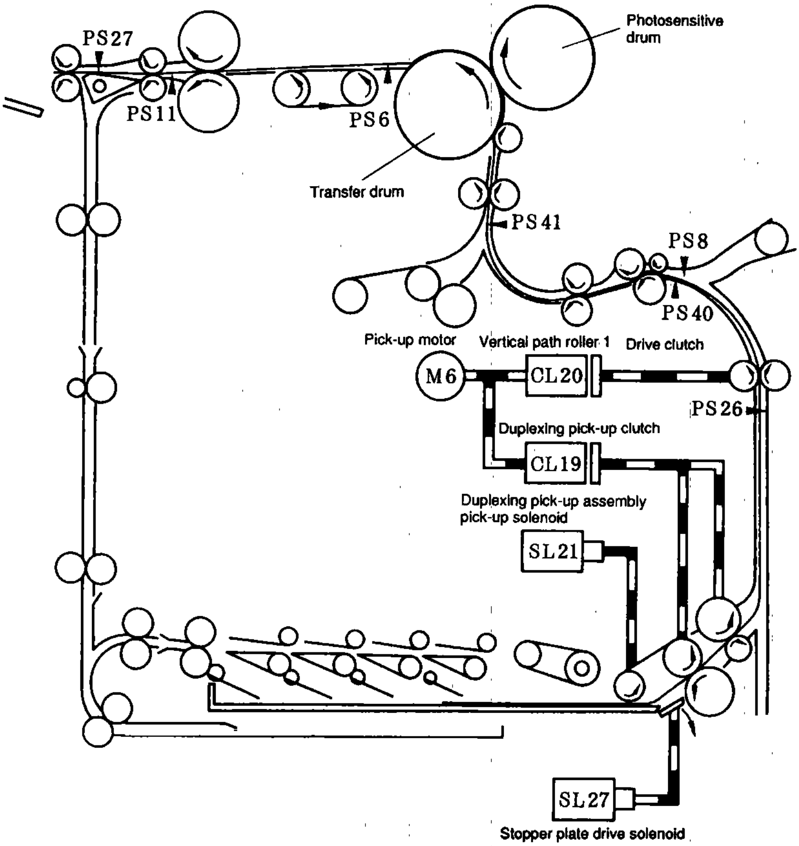

PS27
PS11
PS6
Photosensitive drum
Transfer drum
PS41
PS8
PS40
Pick-up motor
Vertical path roller 1
Drive clutch
M6
CL20
PS26
Duplexing pick-up clutch
CL19
Duplexing pick-up assembly pick-up solenoid
SL21
SL27
Stopper plate drive solenoid

Figure 3-626

b. Sequence of Pick-Up Operations (duplexing unit)

Duplexing unit, A4, 2 Copies Continuous, 4-Color, DIRECT

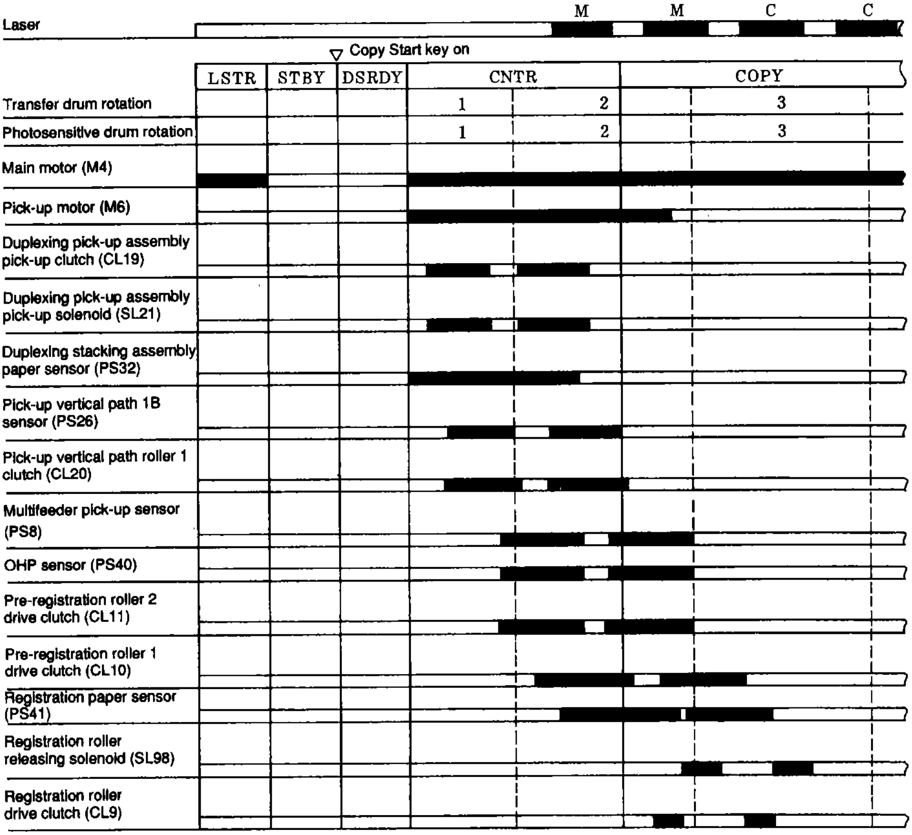

Laser
M
M
C
C
Copy Start key on
LSTR
STBY
DSRDY
CNTR
COPY
Transfer drum rotation
1
2
3
Photosensitive drum rotation
1
2
3
Main motor (M4)
Pick-up motor (M6)
Duplexing pick-up assembly pick-up clutch (CL19)
Duplexing pick-up assembly pick-up solenoid (SL21)
Duplexing stacking assembly paper sensor (PS32)
Pick-up vertical path 1B sensor (PS26)
Pick-up vertical path roller 1 clutch (CL20)
Multifeeder pick-up sensor (PS8)
OHP sensor (PS40)
Pre-registration roller 2 drive clutch (CL11)
Pre-registration roller 1 drive clutch (CL10)
Registration paper sensor (PS41)
Registration roller releasing solenoid (SL98)
Registration roller drive clutch (CL9)

Figure 3-627

D. Controlling Registration and Retention

1. Outline

After pick-up, the copy paper is made to form an arc against the registration roller for correcting any skew, and is moved to the retention roller by the registration roller; the retention roller then puts and holds the copy paper on the transfer sheet. The rotation of the registration roller and the rotation of the engaging/releasing roller, and retention roller are driven by the drive of the main motor through their respective solenoids/clutches.

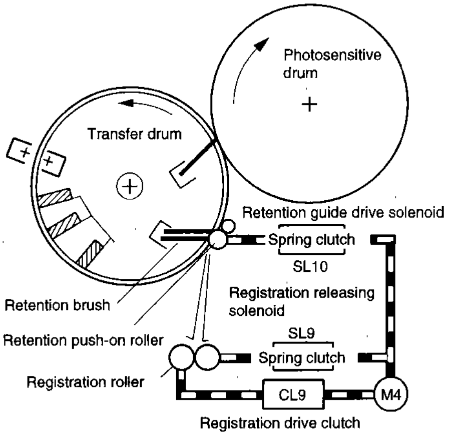

Photosensitive drum
Transfer drum
Retention guide drive solenoid
Spring clutch
SL10
Registration releasing solenoid
SL9
Spring clutch
Retention brush
Retention push-on roller
Registration roller
CL9
M4
Registration drive clutch

Figure 3-628

2. Releasing the Registration Roller

When the copy paper sent by the registration roller is placed on the transfer drum sheet, the registration releasing solenoid (SL9) turns on, thereby causing the registration engaging cam to rotate and releasing the registration link roller from the registration roller by the drive of the main motor.

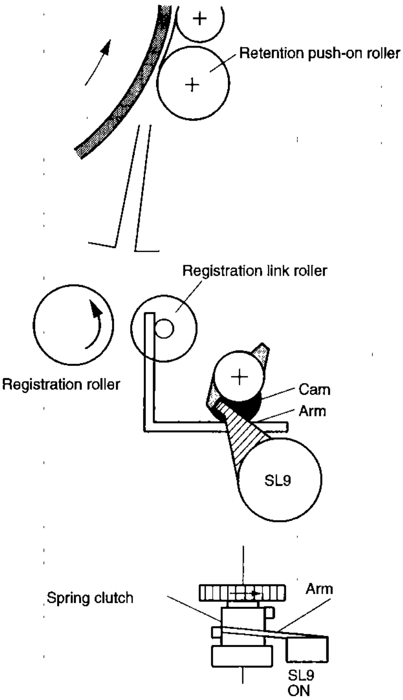

Retention push-on roller
Registration link roller
Registration roller
Cam
Arm
SL9
Spring clutch
Arm
SL9 ON

Figure 3-629

3. Retention Roller

The copier's transfer drum does not have a gripper, and copy paper is held to the transfer drum by means of static electricity.

During copying operation, the retention guide drive solenoid (SL10) remains on as long as the length of the copy paper, thereby keeping the retention roller in contact with the transfer drum sheet. At this time, the retention brush turns on to keep the copy paper on the transfer drum sheet by means of static electricity.

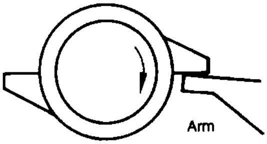


Figure 3-630 Control Cam (rear view)

Reference:

1. When making a mono-color copy, the paper is separated before making a full rotation; for this reason, SL10 does not turn off during copying operation but remains on.
2. When two sheets of copy paper is retained, SL10 does not turn off over the gap between the two sheets.

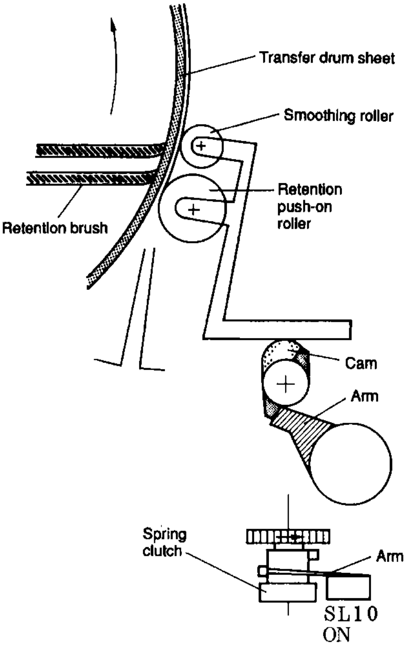

Transfer drum sheet
Smoothing roller
Retention push-on roller
Retention brush
Cam
Arm
Spring clutch
Arm
SL10 ON

Figure 3-631

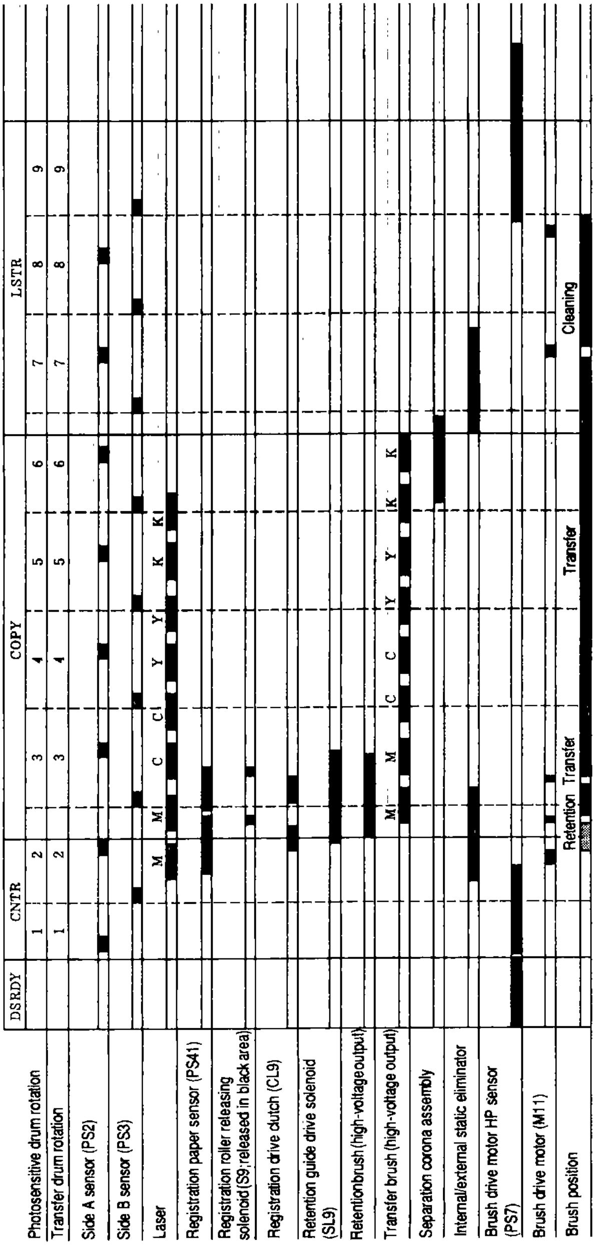


Figure 3-632 A4/LTR, 2 Copies, 4-Color, DIRECT, Cassette 1, Potential Control

E. Transfer Drum

1. Outline

The transfer drum is constructed as shown in Figure 3-633.

The transfer drum keeps copy paper on the transfer sheet by means of static electricity, and makes as many as four rotations; then, it moves the copy paper to the fixing assembly.

The transfer drum is butted against the photosensitive drum by the work of the main motor (M4) and cam when the transfer drum drive solenoid (SL13) is on. The transfer drum is rotated by the drive of the drum motor (M2) by way of the rotation of the photosensitive drum.

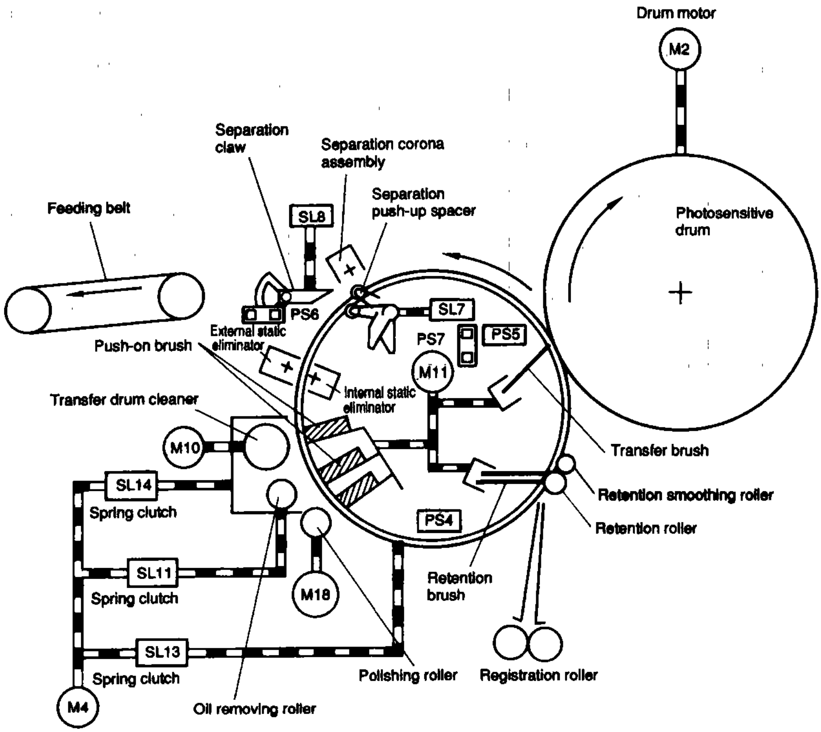
The feeding belt and registration roller, on the other hand are driven by the main motor (M4).

The transfer drum cleaner is engaged by the transfer drum cleaner solenoid (SL14), and is driven by the transfer drum cleaning brush motor (M10).

When the oil removing roller is driven by the main motor when the transfer drum cleaner solenoid (SL14) and oil removing roller solenoid (SL11) turn on; the polishing roller is driven by the polishing roller motor (M18).

Each of the brushes inside the transfer drum is driven by the brush drive motor.

The separation claw and separation push-up roller are each driven by separate solenoids.


Drum motor
M2
Separation claw
Separation corona assembly
Separation push-up spacer
Feeding belt
SL8
Photosensitive drum
PS6
SL7
External static eliminator
Push-on brush
PS7
PS5
M11
Transfer drum cleaner
Internal static eliminator
Transfer brush
M10
SL14
Retention smoothing roller
Spring clutch
PS4
Retention roller
SL11
Retention brush
Spring clutch
M18
SL13
Spring clutch
Polishing roller
Registration roller
M4
Oil removing roller

PS4: Pre-transfer paper sensor
PS5: Post-transfer paper sensor
PS6: Separation sensor
PS7: Brush drive motor HP sensor
SL7: Separation push-up solenoid
SL8: Separation claw drive solenoid
SL11: Oil removing roller solenoid

SL13: Transfer drum drive solenoid
SL14: Transfer drum cleaner solenoid
M2: Drum motor
M4: Main motor
M10: Transfer drum cleaning brush motor
M11: Brush drive motor
M18: Polishing roller motor

Figure 3-633

2. Controlling the Engagement of the Brushes Inside the Transfer Drum

Inside the transfer drum are found the retention brush, transfer brush, and push-on brush for cleaning. Each of the brushes are away from the transfer drum sheet standby, and they are engaged as necessary with the transfer drum sheet by their respective engaging cams. As shown in Figure 3-634, the three engaging cams are rotated by the drive of the brush drive motor (M11).

Figure 3-635,-636,-637 is a diagram showing the state of each brush and cam.

The copier's brush drive motor is a stepping motor, which controls the rotation of the cams to drive the brushes by applying specific pulses to the brush drive motor after the DC controller PCB has detected that the brush drive motor is at its home position by the brush drive motor HP sensor (PS7).

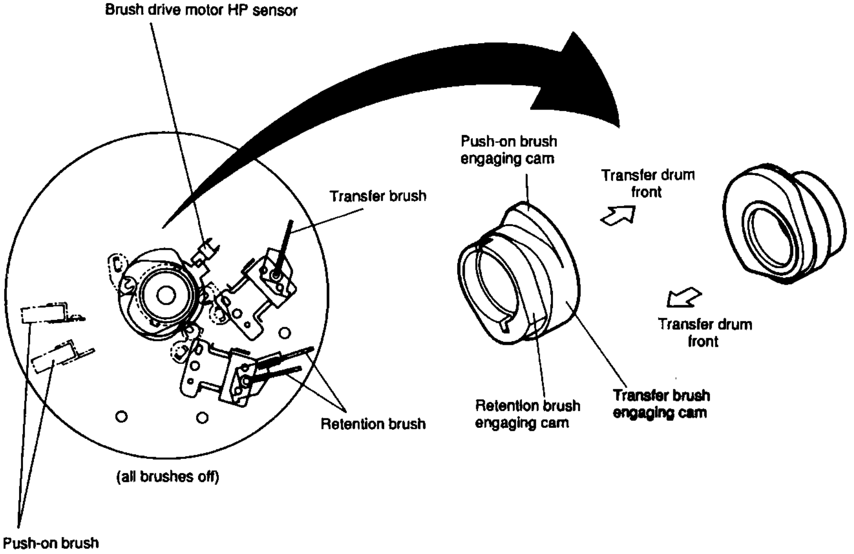

Brush drive motor HP sensor
Push-on brush engaging cam
Transfer drum front
Transfer brush
Transfer drum front
Retention brush
Retention brush engaging cam
Transfer brush engaging cam
(all brushes off)
Push-on brush

Figure 3-634

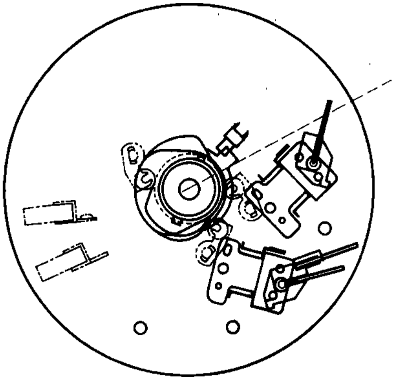
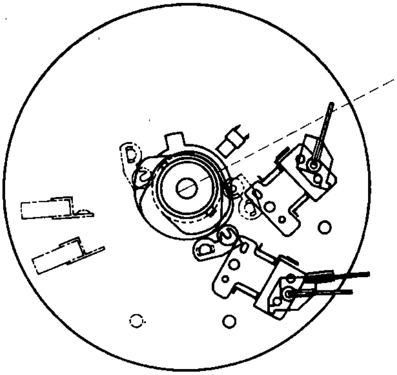
Home position 	All brushes, i.e., retention brush, transfer brush, and push-on brush are off.
Retention 	The retention brush is on; the transfer brush and push-on brush are off.

Figure 3-635

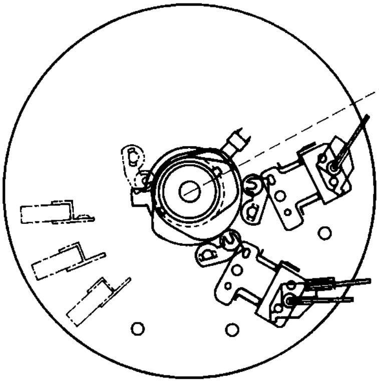
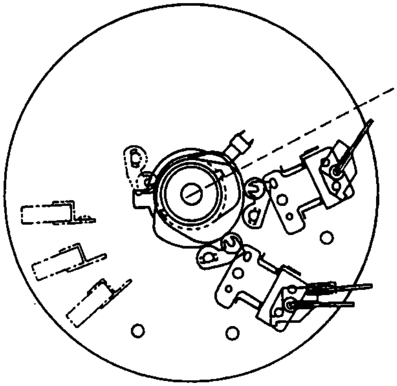
Transfer of 1st color 	The retention brush and transfer brush are on; the push-on brush is off.
Transfer of 2nd to 4th colors 	The retention brush/transfer brush turns on, and the push-on brush turns off; however, the retention brush turns off if LTR-R is selected.

Figure 3-636

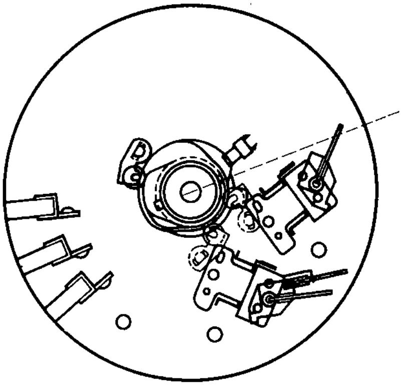
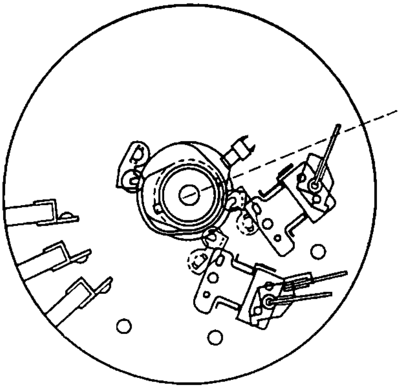
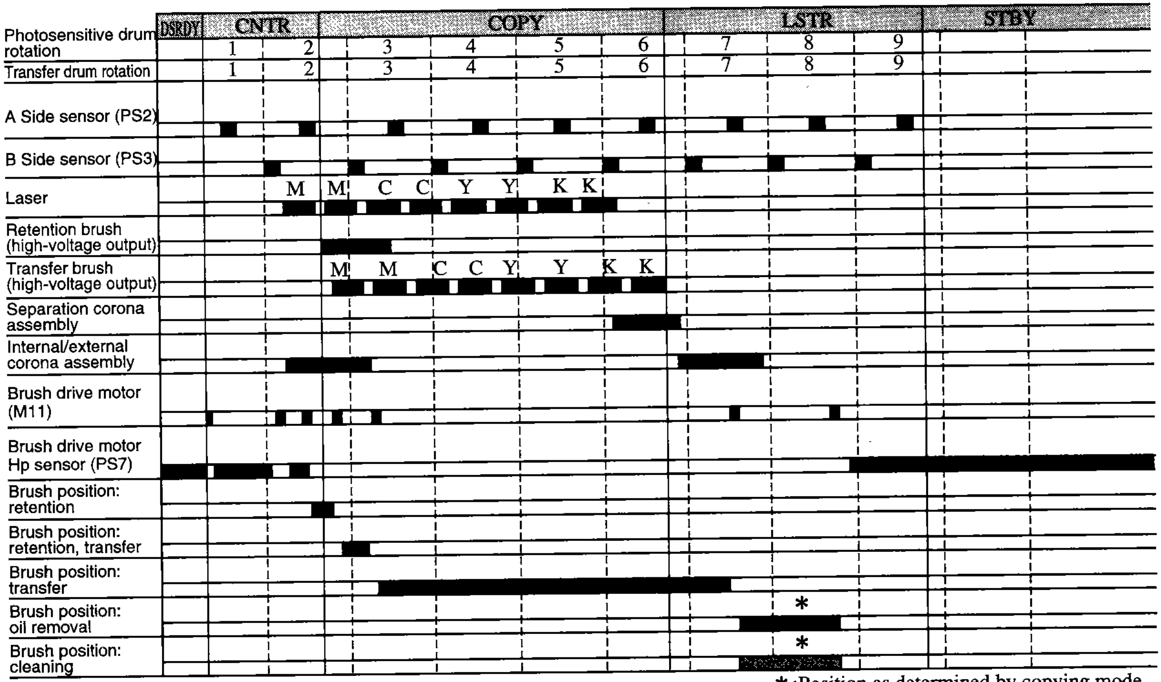
Transfer drum sheet cleaning 	The push-on brush is on; the retention brush and transfer brush are off.
Oil removing/cleaning 	The push-on brush is on; the transfer brush and retention brush are off.

Figure 3-637


DSRDY
CNTR
COPY
LSTR
STBY
Photosensitive drum rotation
Transfer drum rotation
1
2
3
4
5
6
7
8
9
A Side sensor (PS2)
B Side sensor (PS3)
Laser
M M C C Y Y K K
Retention brush (high-voltage output)
Transfer brush (high-voltage output)
M M C C Y Y K K
Separation corona assembly
Internal/external corona assembly
Brush drive motor (M11)
Brush drive motor Hp sensor (PS7)
Brush position: retention
Brush position: retention, transfer
Brush position: transfer
Brush position: oil removal
Brush position: cleaning
*
*

*:Position as determined by copying mode.

Figure 3-638 Brush Position A4/LTR, 2 Copies, 4-Color, DIRECT, Cassette 1

3. Separation Control

The copier executes separation, for both side A and side B, by its separation claw and separation push-up roller. See Table 3-640 for how separation is executed.

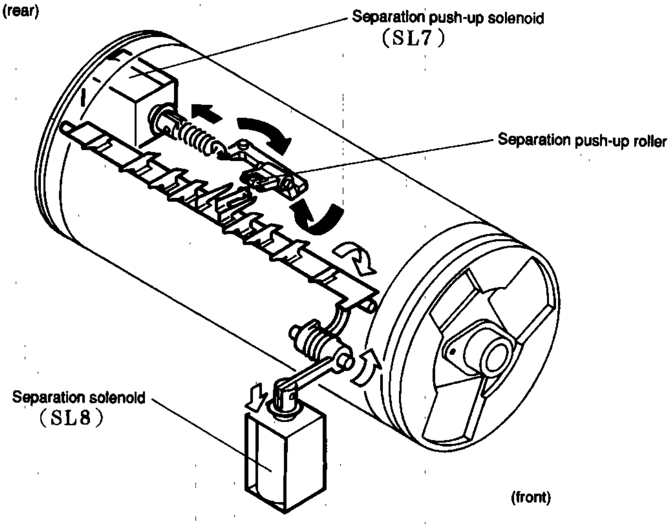

(rear)
Separation push-up solenoid (SL7)
Separation push-up roller
Separation solenoid (SL8)
(front)

Figure 3-639

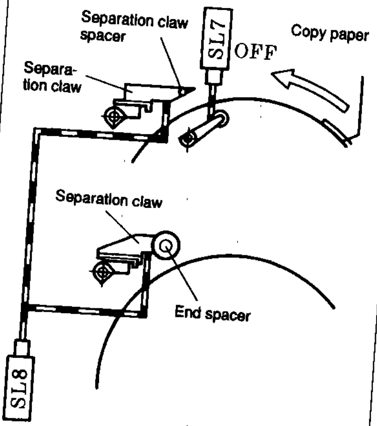
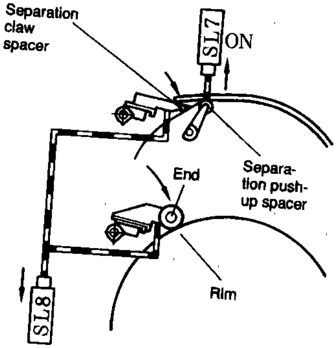
<table>
<tr>
<td>1</td>
<td>

Separation claw spacer
SL7
OFF
Copy paper
Separa-tion claw
Separation claw
End spacer
SL8
</td>
<td>The diagram shows the condition immediately after transfer to copy paper.
The separation claw solenoid (SL8) and separation push-up solenoid (SL7) are off.</td>
</tr>
<tr>
<td>2</td>
<td>

Separation claw spacer
SL7
ON
End
Separa-tion push-up spacer
Rim
SL8
</td>
<td>The separation solenoid (SL8) and separation push-up solenoid (SL7) turn on, thereby putting the separation spacer in contact with the transfer drum sheet. The separation claw is away from the transfer drum sheet for a distance equal to the thickness of the separation claw.
By the work of SL7, the separation push-up roller pushes up the transfer drum sheet from inside to deform a portion of the transfer drum sheet, thereby increasing the curvature.
Thereafter, the body of the copy paper serves to move its leading edge away from the transfer drum sheet, at which time the separation claw moves in to trigger separation.</td>
</tr>
</table>

Figure 3-640

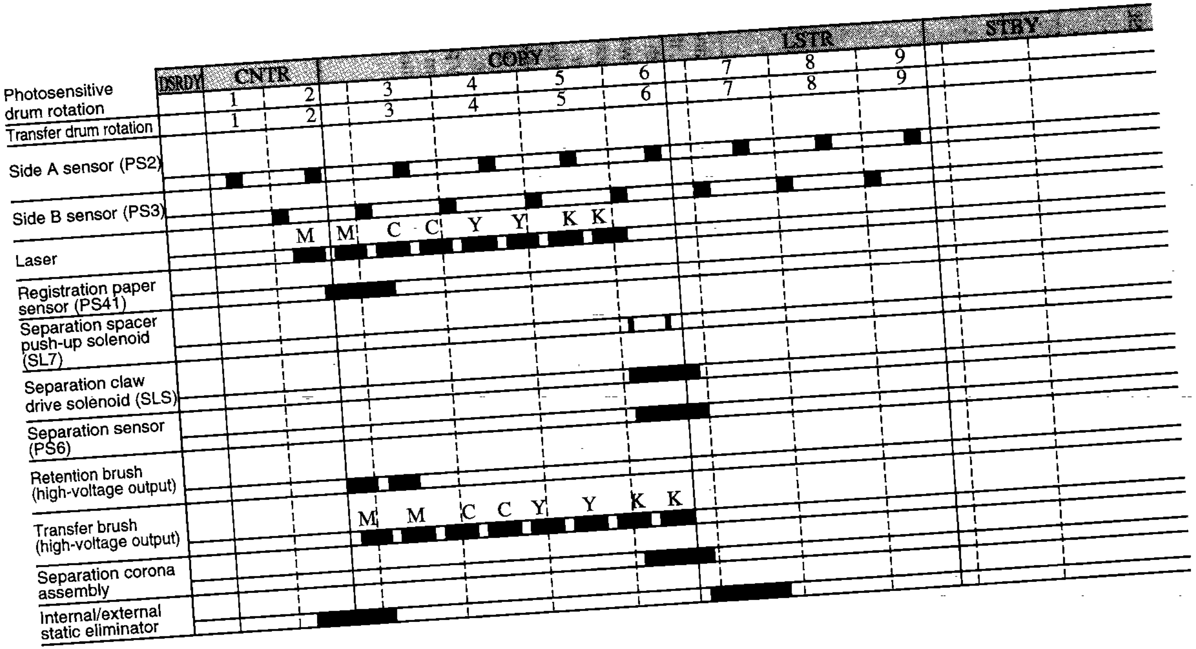

DSRDY
CNTR
COPY
LSTR
STBY
Photosensitive drum rotation
1 2 3 4 5 6 7 8 9
Transfer drum rotation
1 2 3 4 5 6 7 8 9
Side A sensor (PS2)
Side B sensor (PS3)
Laser
M M C C Y Y K K
Registration paper sensor (PS41)
Separation spacer push-up solenoid (SL7)
Separation claw drive solenoid (SLS)
Separation sensor (PS6)
Retention brush (high-voltage output)
Transfer brush (high-voltage output)
M M C C Y Y K K
Separation corona assembly
Internal/external static eliminator

Figure 3-641 A4/LTR, 2 Copies, 4-Color, DIRECT, Cassette1 Potential Control

4. Cleaning the Transfer Drum Sheet

Since the transfer drum sheet keeps copy paper on it by means of static electricity, it is subject to adhesion of foreign matter. The presence of foreign matter on the transfer drum sheet is likely to soil the back of copy paper and cause faulty transfer or retention.

To avoid such problems, the transfer drum sheet is cleaned by the following methods:

1. cleaning by the external brush/push-on brush.
2. cleaning by the oil removing roller.
3. cleaning by the polishing roller.

These cleaning operations may be roughly classified as shown in Table 6-609.

Type	Timing	Cleaner
Normal cleaning	Post rotation	External brush/internal brush (retention static elimination)
Duplexing cleaning	Post rotation after duplexing copying	External brush/internal brush + oil removing roller
Specific cleaning	Post rotation after making specific number of copies	Polishing roller

Table 6-609

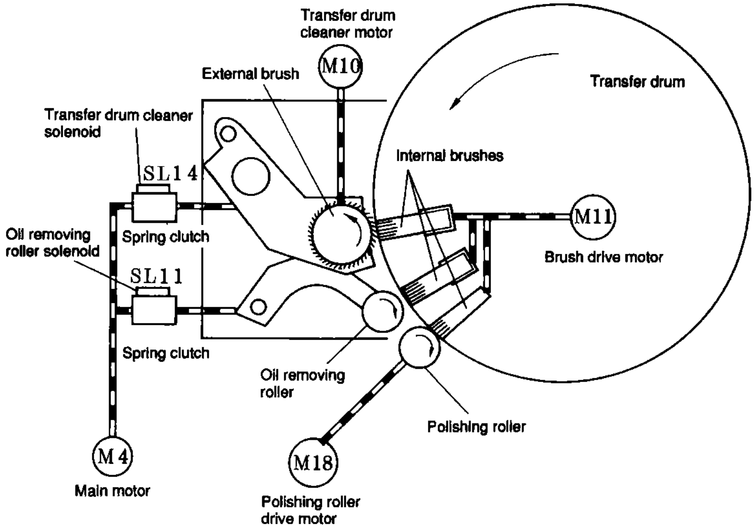

Transfer drum cleaner motor
M10
External brush
Transfer drum
Transfer drum cleaner solenoid
SL14
Internal brushes
M11
Brush drive motor
Oil removing roller solenoid
Spring clutch
SL11
Spring clutch
Oil removing roller
Polishing roller
M4
Main motor
M18
Polishing roller drive motor

Figure 3-642

a. External Brush

The external brush is rotated at a high speed by the transfer cleaner motor (M10) in the opposite direction from the transfer drum sheet.

While the main motor (M4) is rotating, the transfer cleaner solenoid (SL14) turns on, causing the drive of the main motor to the cam through the spring clutch. The rotation of the cam in turn moves the transfer drum cleaner to butt against the transfer drum sheet.

The internal brush is butted against the transfer drum sheet by the work of the cam inside the transfer drum and by the drive of the brush drive motor (M11).

The transfer drum is cleaned during post rotation by the external brush.

The position of toner used for black toner density detection executed on the photosensitive drum corresponds to the position of the transfer drum connecting plate in relation to the transfer drum.

For this reason, the area in front and behind the transfer drum connecting plate is cleaned a single operation more than other areas of the transfer drum connecting plate.

The internal brush is released at the transfer drum connecting plate.

This consideration helps prevent the deformation of the internal brush which otherwise could be caused by interference between the transfer drum sheet fixing plate and internal brush.

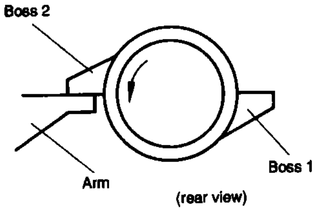


Figure 3-643 Control Cam

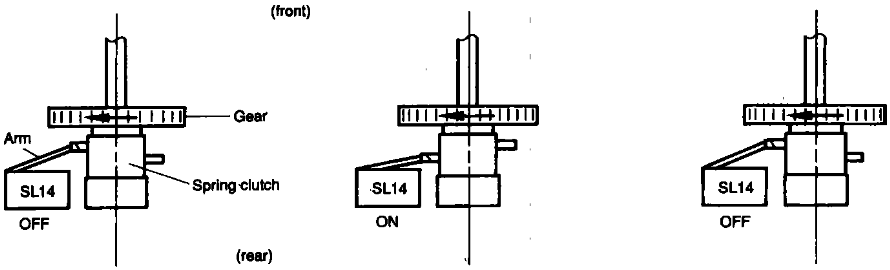


Figure 3-644

5. Oil Removing Roller

In two-sided copy mode, copy paper whose first side has already been fixed is retained on the transfer sheet, causing the transfer sheet to come into contact with fixing oil. If post rotation was started as it is, the fixing oil would move from the transfer sheet to the photosensitive drum, causing the next copy to suffer from such detrimental effects as fogging. To prevent such a problem, the copier butts the oil removing roller against the transfer drum after copying on the second side to clean the transfer drum.

The oil removing roller is butted by turning on the oil removing roller solenoid (SL11) using the drive from the main motor. At this time, the internal brush for the roller is butted from inside the transfer drum, and the transfer drum cleaner motor (M10) is turned on to rotate the external brush as well, thereby enhancing the cleaning efficiency.

6. Polishing Roller

a. Outline

Over a period of time, the transfer sheet starts to collect paper lint, which leads to weakening of retention. To correct such deterioration, the copier is provided with a mechanism that polishes the surface of the transfer sheet for a specific number of copies, thereby recovering the force of retention.

When the polishing roller drive motor (M18) turns on, the polishing roller is engaged with the transfer sheet to start link rotation of the polishing roller, thereby polishing the transfer sheet.

b. Operation

When the polishing roller drive motor (M18) turns on, the drive belt and the drive gear start to rotate, in turn rotating the spring clutch. The spring clutch is stopped after having made a half rotation by means of a stopper; since the motor (M18) keeps rotating, however, the polishing roller is butted against the transfer drum by the polishing roller engaging spring with the motor shaft as its fulcrum. The surface of the transfer drum sheet is polished in this condition.

The polishing roller is released and moved away from the transfer drum sheet by the work of the polishing roller returning spring.

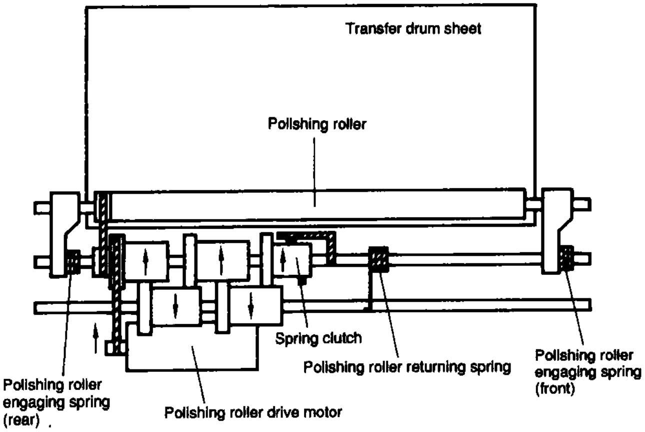

Transfer drum sheet
Polishing roller
Spring clutch
Polishing roller returning spring
Polishing roller engaging spring (front)
Polishing roller engaging spring (rear)
Polishing roller drive motor

Figure 3-645

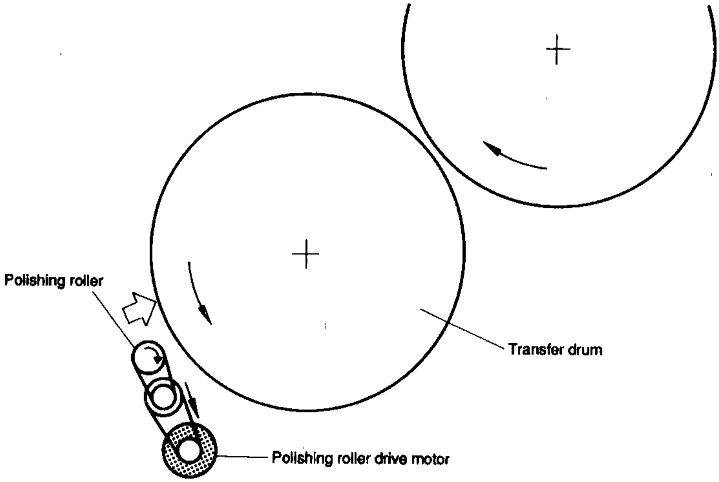


Figure 3-646 Cross Section

c. Conditions and Period of Operation

The polishing roller is operated under the following conditions and for the following time period:

Conditions	Time
The temperature of the fixing roller is 110°C when the power switch is turned on and, in addition, the switch is turned on after making 1,000 copies.	As long as the transfer drum makes 50 rotations. (The transfer cleaner remains in contact for 52 rotations.)
During post rotation after 12,000 copies (cumulative while the copier remains powered) have been made.	

F. Fixing/Delivery Assembly

1. Outline

The following loads are driven by the fixing motor (M5):

- Upper fixing roller
- Lower fixing roller
- Delivery roller
- Oil applying roller
- Fixing belt engagement
- Feeding belt

The cleaning belt is driven by the take-up solenoid (SL6).

To ensure proper fixing during two-sided copy or OHP copy mode, the copier controls the fixing speed in four different settings; this consideration also serves to make up for its path.

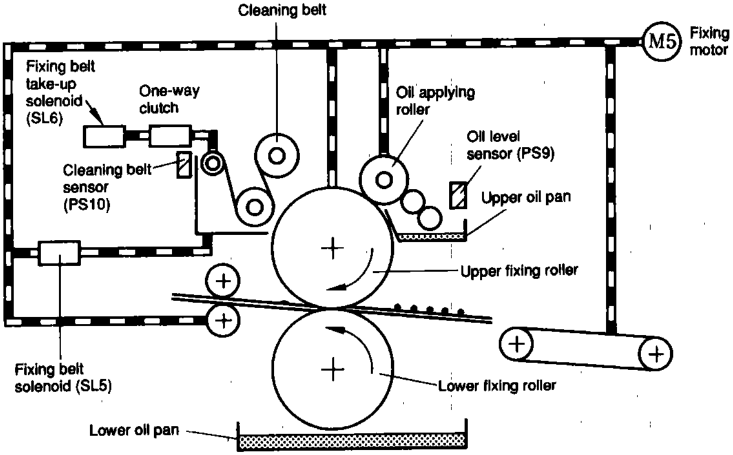

Cleaning belt
M5
Fixing motor
Fixing belt take-up solenoid (SL6)
One-way clutch
Oil applying roller
Oil level sensor (PS9)
Cleaning belt sensor (PS10)
Upper oil pan
Upper fixing roller
Fixing belt solenoid (SL5)
Lower fixing roller
Lower oil pan

Figure 3-647

2. Controlling the Fixing Roller Temperature

The upper fixing roller and lower fixing roller are each heated by a single fixing heater (H1, 600 W; H2, 600 W). The temperature of the upper fixing roller is monitored by a thermistor (THM1), and the temperature of the lower fixing roller is also monitored by a thermistor (THM2).

Fixing roller temperature is 'high'
→ Thermistor resistance is too 'low'
→ Voltage of fixing roller surface temperature detection signal (THM1, THM2) is 'low'

Based on the voltage, the microprocessor on the DC controller causes the upper fixing heater drive signal (UHON) and lower fixing heater drive signal (LHON) to go either '1' or '0' so as to keep the surface temperature of the upper roller and lower roller at a specific level.

Upper roller
full color copying.......controlled to 173°C (173°C)
mono color coping ....controlled to 185°C (185°C)
in STBY ....controlled to 170°C (170°C)

Lower roller
full color copying.......controlled to 171°C (162°C)
mono color coping ....controlled to 183°C (174°C)
in STBY ....controlled to 170°C (161°C)

(The value in parentheses indicates the temperature of the thermistor.)

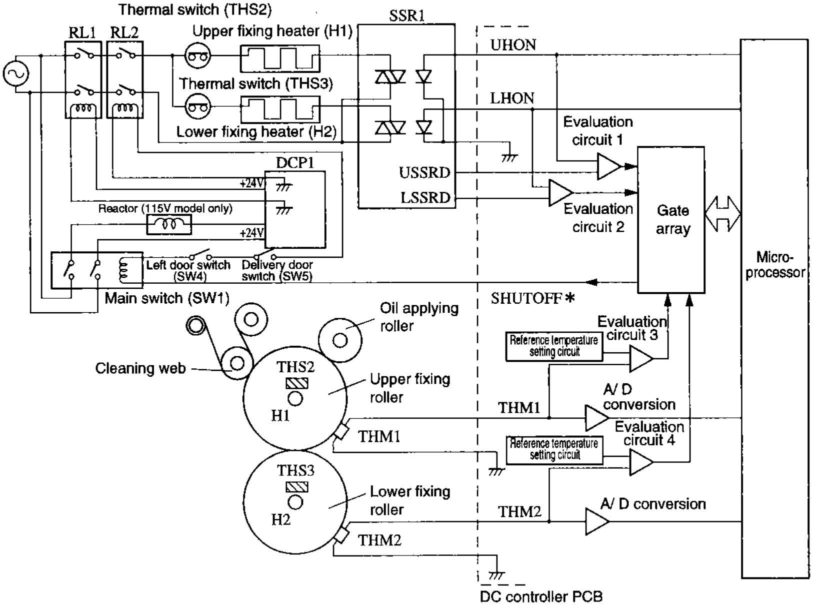

Thermal switch (THS2)
RL1
RL2
Upper fixing heater (H1)
SSR1
UHON
Thermal switch (THS3)
LHON
Lower fixing heater (H2)
Evaluation circuit 1
DCP1
+24V
USSRD
LSSRD
Reactor (115V model only)
+24V
Evaluation circuit 2
Gate array
Left door switch (SW4)
Delivery door switch (SW5)
Micro-processor
Main switch (SW1)
Oil applying roller
SHUTOFF*
Evaluation circuit 3
Reference temperature setting circuit
Cleaning web
THS2
H1
Upper fixing roller
A/D conversion
THM1
THM1
Evaluation circuit 4
Reference temperature setting circuit
THS3
H2
Lower fixing roller
THM2
A/ D conversion
THM2
DC controller PCB

Figure 3-648

3. Protection Mechanism

The copier is equipped with the following four protection mechanisms to prevent problems in the fixing heater:

- The microprocessor monitors the voltage of thermistors THM1 and THM2; in response to an error, the copier indicates 'E000'.
- The gate array monitors the state of the SSR and heater drive signal; if the SSR is on in the absence of the heater drive signal from the microprocessor (USSRD, or LSSRD=1), it generates the SHUTOFF* signal to turn off RL2, thereby cutting power to the fixing heater.
- The gate array monitors the state of the SSR and heater drive signal; if the SSR is off in the presence of the heater drive signal (USSRD or LSSRD=0), an open circuit is identified in the heater circuit, and the copier indicates 'E000'.
- If the temperature inside the thermal switch for the upper roller exceeds 230°C, or if the temperature inside the thermal switch for the lower roller exceeds 230°C, the thermal switch turns off to cut out the power to the fixing heater.

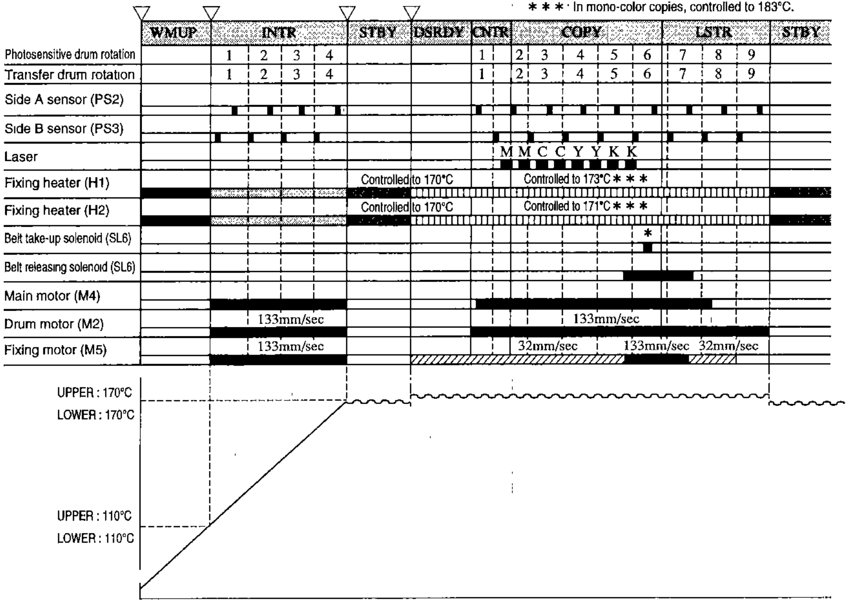
Reference:

> Once its contact opens, the thermal switch (THS2, THS3) cannot be used again; the contact will not recover even if the temperature lowers from error to normal.

Resetting for E000

1) Remove the cause.
2) Activate service mode, and select 'FUSER' under 'FUNC'.
3) Select 'E000-RLS', and set it to 'E000-RLS=1'.
4) Turn off and on the power switch.

* : For small size copies, once for every 15 copies. For large size copies, twice for every 15 copies.
** : In mono-color copies, controlled to 185°C.
*** : In mono-color copies, controlled to 183°C.



Power switch ON
110°C
170°C
Copy start key ON
WMUP
INTR
STBY
DSRDY
CNTR
COPY
LSTR
STBY
Photosensitive drum rotation
Transfer drum rotation
Side A sensor (PS2)
Side B sensor (PS3)
Laser
Fixing heater (H1)
Fixing heater (H2)
Belt take-up solenoid (SL6)
Belt releasing solenoid (SL6)
Main motor (M4)
Drum motor (M2)
Fixing motor (M5)
1 2 3 4
1 2 3 4 5 6 7 8 9
M M C C Y Y K K
Controlled to 170°C
Controlled to 173°C ***
Controlled to 171°C ***
*
133mm/sec
32mm/sec
133mm/sec
32mm/sec
UPPER : 170°C
LOWER : 170°C
UPPER : 110°C
LOWER : 110°C

Figure 3-648 A4/LTR, 2 Copies, 4-Color, DIRECT, Cassette 1, Plain

3. Driving the Cleaning Belt

The belt used to clean the upper fixing drive is engaged with the upper fixing roller when the fixing belt releasing solenoid (SL5) turns on and off in response to the belt drive signal (SL5D*; '0', '1') generated by the DC controller.

The belt is taken up 0.45 mm each time the fixing belt take-up solenoid (SL6) turns on and off. (The clearing belt itself becomes released when it is taken up.)

The fixing belt take-up solenoid turns on and off so many times as determined by the length of copy paper used.

Copy paper	Number of cleaning belt solenoid operations
Small size (182 to 216 mm)	Once for every 8 copies
Large size (217 to 432 mm)	Once for every 4 copies

Table 3-610

Note:
For transparencies, the solenoid turns on once for every 2 copies.

The edge of the belt is provided with a cut-out.

When the belt has been taken up to the point of the cut-out, the arm that has been supported by the belt drops and is detected by the belt length sensor (PS10).

When the sensor detects the arm, the copier indicates a message on its control panel.

Reference:

1. 'E005' appears when the cleaning belt solenoid has turned on and off about 270 times after the message has been indicated.
2. The belt is 5 m in length, and the cut-off is located at a point 4.7 m from the first end of the belt.
3. You must execute 'E005-RLS' of 'FUSER' under 'FUNC' in service mode and turn off then on the power switch whenever you have replaced the cleaning belt.

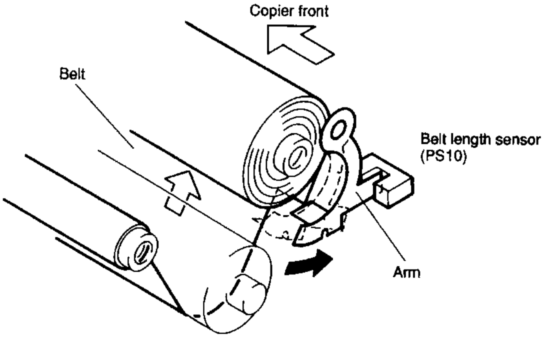


Figure 3-649

4. Fixing Oil Applying Mechanism

As shown in Figure 3-650, the copier uses a circulating mechanism for fixing oil.

The oil applying roller remains in contact with the upper fixing roller at all times to prevent offset by supplying the roller with fixing oil.

The work of the oil pump solenoid (SL12) draws oil from the oil bottle into the upper oil pan.

The level of the silicone oil in the upper oil pan is monitored by the oil level sensor (PS9) through detection of the position of the arm of the float floating in the upper oil pan.

If PS9 does not detect the arm at power-on, SL12 repeats turning on and off until PS9 detects it.

If PS9 does not detect the arm after operating SL12 for 10 min, the copier identifies the absence of oil, and indicates a message.

Then, 'E008' is indicated if PS9 does not detect the arm after making 100 copies.

The oil applying felt inside the oil pump solenoid serves as a filter for the circulating silicone oil.

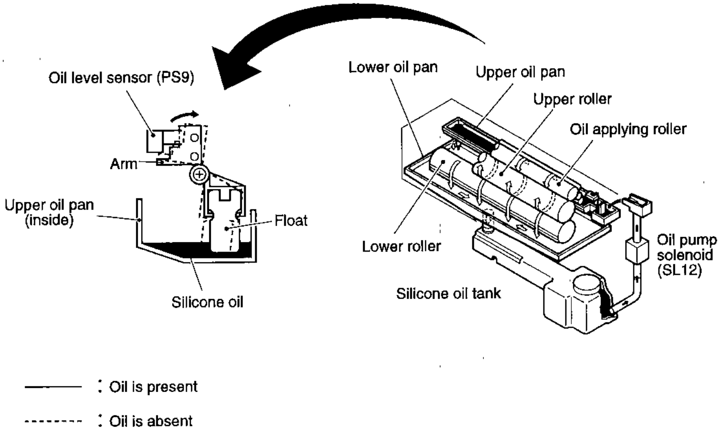

Oil level sensor (PS9)
Arm
Upper oil pan (inside)
Float
Silicone oil
Lower oil pan
Upper oil pan
Upper roller
Oil applying roller
Lower roller
Oil pump solenoid (SL12)
Silicone oil tank
——— : Oil is present
-------- : Oil is absent

Figure 3-650

Reference:

To clear 'E008',

1) Pour fixing oil into the oil case.
2) Turn off and then off the power switch.
   - The oil supply mechanism is activated automatically with 'E008' still displayed; this operation ends in about 5 min.
3) Turn off and then on the power switch.

5. Controlling the Fixing Speed

The path in the copier's feeding assembly between the transfer drum and the fixing assembly is shorter than the path of conventional copiers; to accommodate the shorter path and to ensure proper fixing in two-sided copy mode or OHP copy mode, the copier controls the fixing speed in four settings.

- Normal mode (plain paper fixing) .... 133 mm/sec
- 2nd side of two-sided copy (plain paper)/special paper 1 .... 121 mm/sec*
- Thick paper (105 to 157g) mode .... 80 mm/sec
- OHP mode .... 80 mm/sec
- Pick-up/retention transfer (all paper types) mode/ special paper 2 .... 32 mm/sec

* Both 1st and 2nd faces

The fixing motor starts to rotate when the drive signal (M5ON*) goes '0'; the speed is varied based on the combination of speed switching signals (M5SPD0 and M5SPD1). If the rotation speed of the fixing motor deviates for some reason, the motor ready signal (M5RDY*) goes '1; in response, the DC controller indicates 'E014' on the control panel.

M5SPD0	M5SPD1	Fixing speed
0	0	133mm/sec
0	1	121mm/sec
1	0	80mm/sec
1	1	32mm/sec

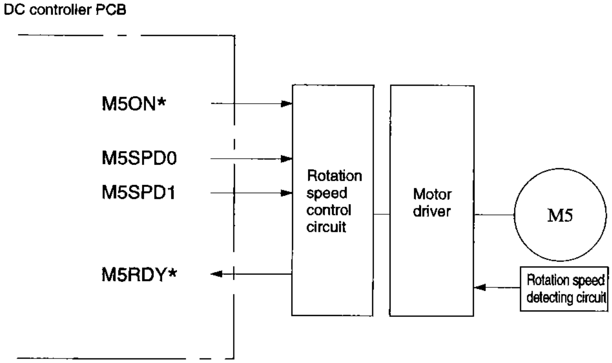

DC controller PCB
M5ON*
M5SPD0
M5SPD1
M5RDY*
Rotation speed control circuit
Motor driver
M5
Rotation speed detecting circuit

Figure 3-651

Reference:

During copying, the fixing web is engaged while in OHP mode and special paper 2 mode; it is disengaged in other modes.

＊ : For small size copies, once for every 8 copies.
For large size copies, twice for every 8 copies.
＊＊ : In mono-color copies, controlled to 185℃
＊＊＊ : In mono-color copies, controlled to 183℃
The temperature of the fixing heater refers to the heater surface temperature.

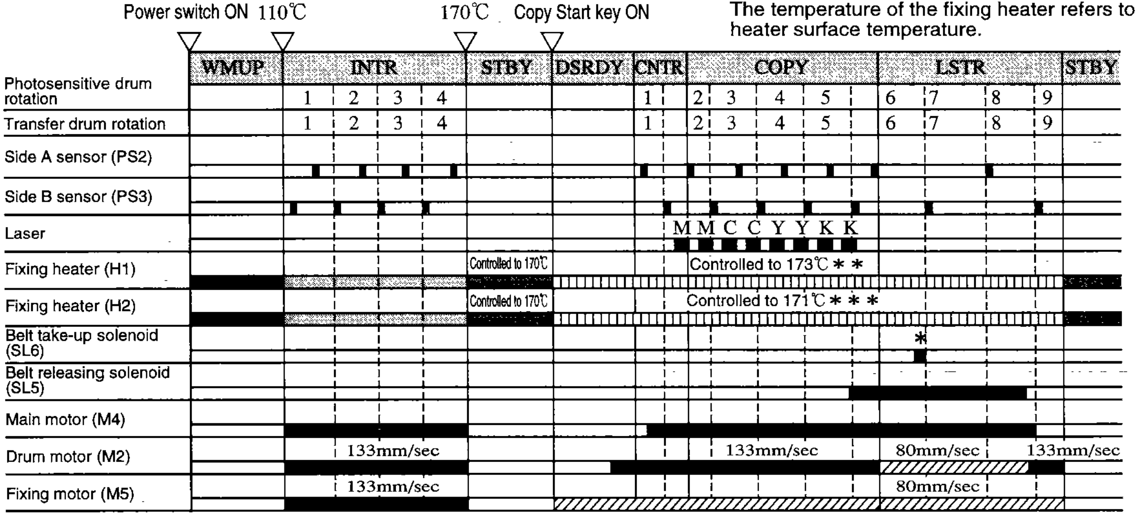
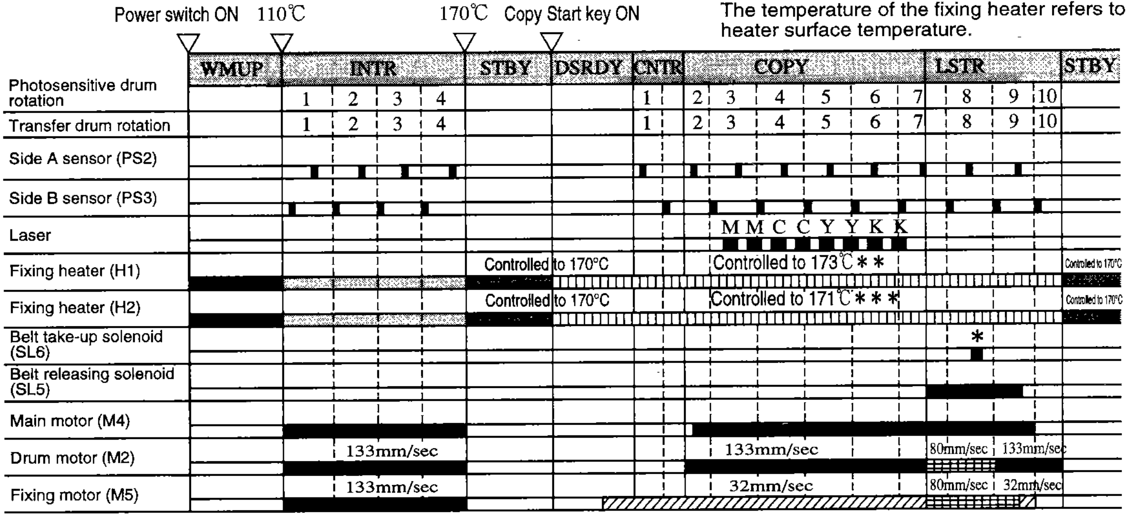

Power switch ON
110℃
170℃
Copy Start key ON
WMUP
INTR
STBY
DSRDY
CNTR
COPY
LSTR
STBY
Photosensitive drum rotation
Transfer drum rotation
Side A sensor (PS2)
Side B sensor (PS3)
Laser
Fixing heater (H1)
Fixing heater (H2)
Belt take-up solenoid (SL6)
Belt releasing solenoid (SL5)
Main motor (M4)
Drum motor (M2)
Fixing motor (M5)
1 2 3 4
1 2 3 4 5 6 7 8 9
M M C C Y Y K K
Controlled to 170℃
Controlled to 173℃＊＊
Controlled to 170℃
Controlled to 171℃＊＊＊
＊
133mm/sec
80mm/sec
133mm/sec
133mm/sec
133mm/sec
80mm/sec

Figure 3-652 A4, LTR, 2 Copies, 4-Color, DIRECT, Cassette 1, OHP


Power switch ON
110℃
170℃
Copy Start key ON
WMUP
INTR
STBY
DSRDY
CNTR
COPY
LSTR
STBY
Photosensitive drum rotation
Transfer drum rotation
Side A sensor (PS2)
Side B sensor (PS3)
Laser
Fixing heater (H1)
Fixing heater (H2)
Belt take-up solenoid (SL6)
Belt releasing solenoid (SL5)
Main motor (M4)
Drum motor (M2)
Fixing motor (M5)
1 2 3 4
1 2 3 4 5 6 7 8 9 10
M M C C Y Y K K
Controlled to 170°C
Controlled to 173℃＊＊
Controlled to 171℃＊＊＊
Controlled to 170°C
*
133mm/sec
80mm/sec
32mm/sec

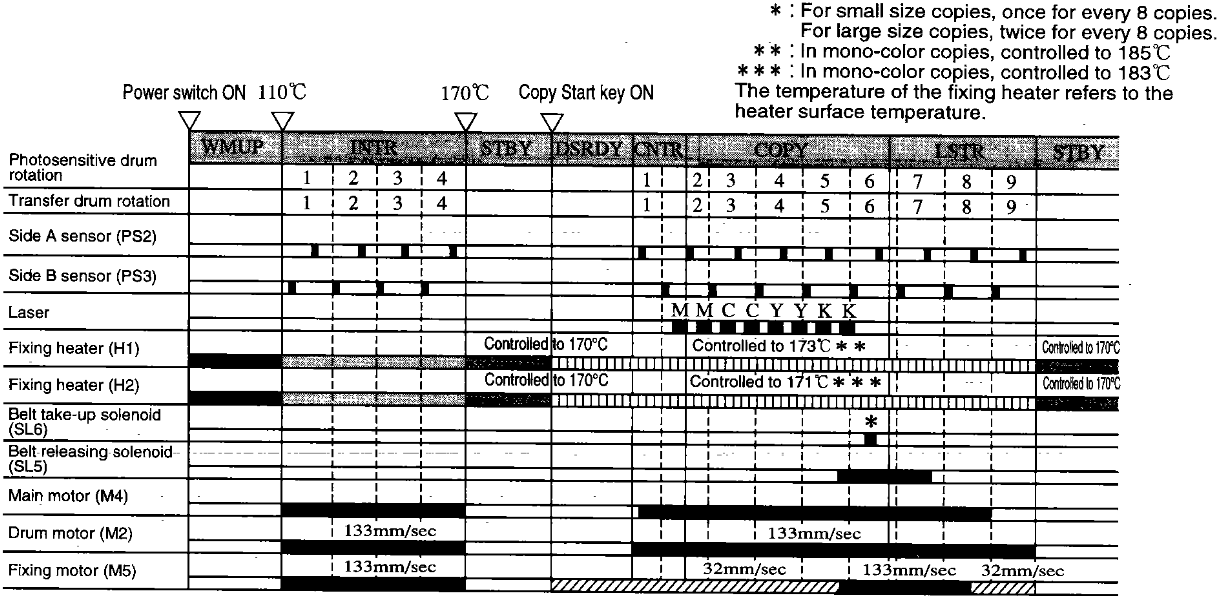
＊ : For small size copies, once for every 8 copies.
For large size copies, twice for every 8 copies.

＊＊ : In mono-color copies, controlled to 185℃

＊＊＊ : In mono-color copies, controlled to 183℃

The temperature of the fixing heater refers to the heater surface temperature.

Figure 3-653 A4/LTR, 2 Copies, 4-Color, DIRECT, Cassette 1, Thick Paper


Power switch ON
110℃
170℃
Copy Start key ON
WMUP
INTR
STBY
DSRDY
CNTR
COPY
LSTR
STBY
Photosensitive drum rotation
Transfer drum rotation
Side A sensor (PS2)
Side B sensor (PS3)
Laser
Fixing heater (H1)
Fixing heater (H2)
Belt take-up solenoid (SL6)
Belt releasing solenoid (SL5)
Main motor (M4)
Drum motor (M2)
Fixing motor (M5)
1 2 3 4
1 2 3 4 5 6 7 8 9
M M C C Y Y K K
Controlled to 170°C
Controlled to 173℃ * *
Controlled to 170°C
Controlled to 170°C
Controlled to 171℃ * * *
Controlled to 170°C
*
133mm/sec
133mm/sec
133mm/sec
32mm/sec
133mm/sec
32mm/sec

* : For small size copies, once for every 8 copies.
For large size copies, twice for every 8 copies.
* * : In mono-color copies, controlled to 185℃
* * * : In mono-color copies, controlled to 183℃
The temperature of the fixing heater refers to the heater surface temperature.

Figure 3-654 A4/LTR, 2 Copies, 4-Color, DIRECT, Cassette 1, Plain

G. Detecting Jams

The copier is equipped with the following sensors to check the presence/absence of copy paper and to make sure that paper is moving properly:

Multifeeder pick-up sensor (PS8)
Pick-up vertical path 1 sensor (PS19/PS26*)
Pick-up vertical path 2 sensor (PS24)*
Pick-up vertical path 3 sensor (PS25)*
OHP sensor (PS40)
Registration paper sensor (PS41)
Pre-photosensitive drum cleaner paper sensor (PS43)
Pre-transfer sensor (PS4)
Post-transfer sensor (PS5)
Separation sensor (PS6)
Delivery inside sensor (PS11)
Delivery outside sensor (PS27)
Delivery vertical path 1 sensor (PS28)*
Duplexing pre-reversal paper sensor (PS29)*
Duplexing post-reversal paper sensor (PS30)*
Duplexing reversing assembly outlet paper sensor (PS31)*
Duplexing stacking assembly paper sensor (PS32)*
Duplexing feeding assembly paper sensor (PS33)*
Delivery vertical path 2 sensor (PS39)*

** For CLC800 only.*

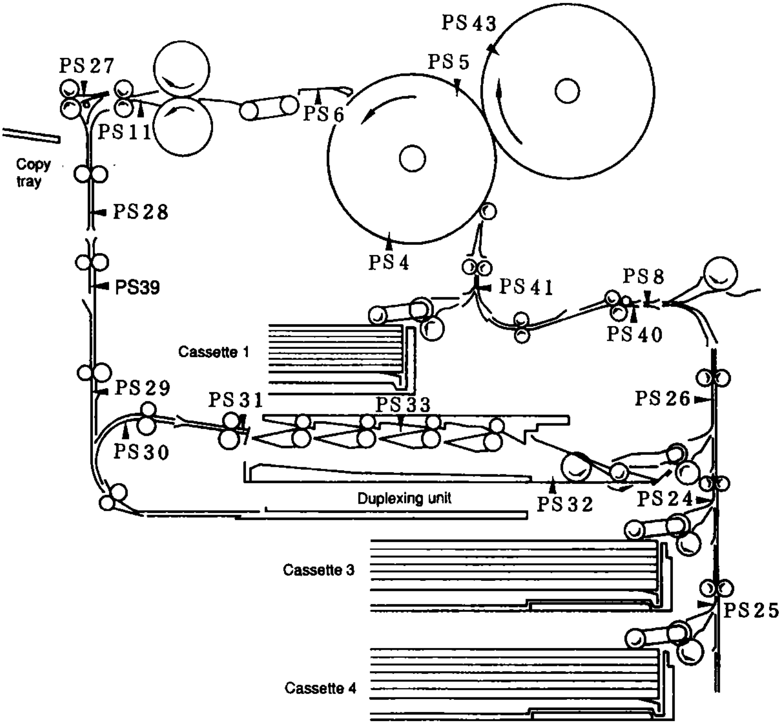

PS43
PS27
PS5
PS6
PS11
Copy tray
PS28
PS4
PS41
PS8
PS39
PS40
Cassette 1
PS29
PS31
PS33
PS26
PS30
Duplexing unit
PS32
PS24
Cassette 3
PS25
Cassette 4

Figure 3-655 (CLC800)

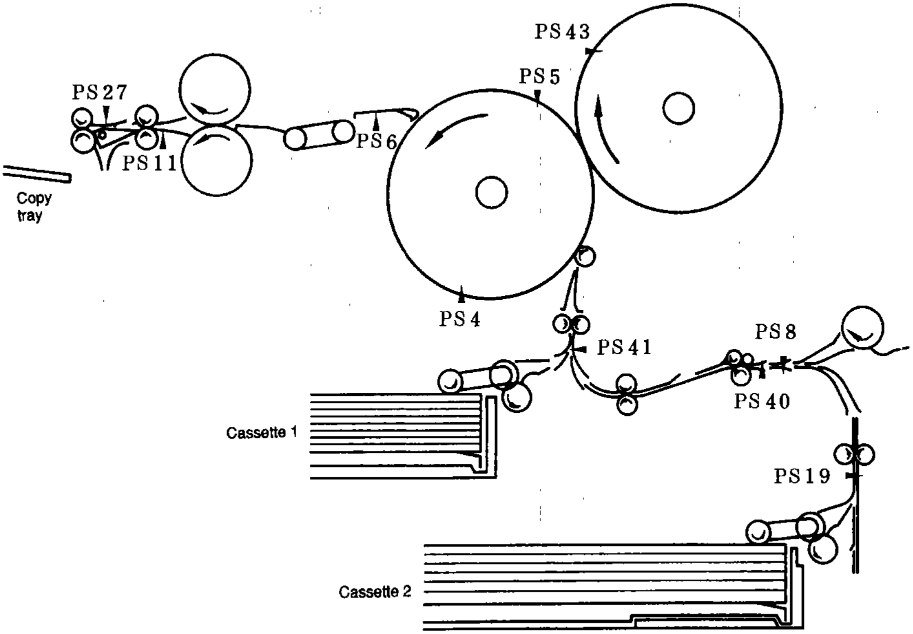


Figure 3-656 (CLC700)

The presence or absence of copy paper and jams is checked with reference to whether there is paper over the respective sensors at such times as stored in the microprocessor in advance.

The copier has a mechanism which retains data on how many copies remain to be made and the copy mode effective at time of jams; therefore, you need not reset the copy mode or the copy count after having opened its door for jam removal.

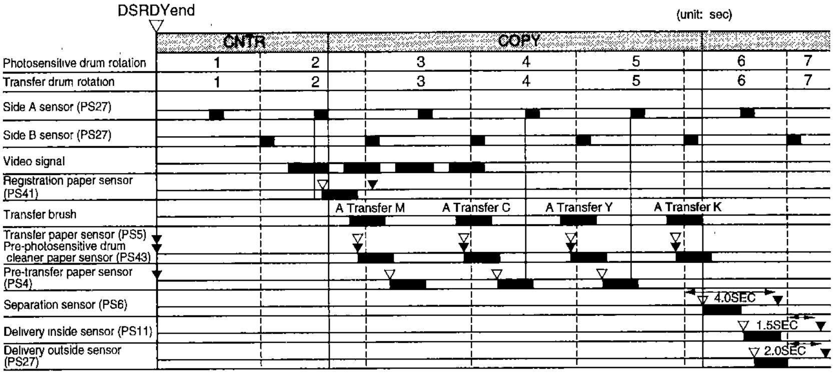
The copier also identifies a jam if its OHP sensor (PS40), separation sensor (PS6), or delivery sensor (PS11, PS27) detects the presence of copy paper at time of power-on.

Likewise, the copier identifies a jam if either pre-transfer paper sensor (PS4) or post transfer sensor (PS5) detects the presence of paper at time of power-on. A check is made once again at the home position of the transfer drum after the drum has made a single rotation; if any of the sensors detects the presence of paper, the copier identifies a jam.

The pre-photosensitive cleaner paper sensor (PS43) is a reflecting-type paper sensor and serves to prevent copy paper from sliding into the photosensitive drum cleaner by monitoring the photosensitive drum for the presence of paper; the sensor is effective only in TYPE 2 machines*.

The new type of DC controller PCB may be used for TYPE 1 CLC700/800*; however, it does not issue an error or jam indication if the sensor is faulty or if the connector is not connected.

*See the cover of Chapter 3.



▽ : Delay jam check (normal if copy paper is present)

▼ : Stationary jam (normal if copy paper is absent)

Figure 3-657 A4/LTR, 2 Copies, 4-Color, DIRECT, Cassette 1, Potential Control

VII. CONTROL PANEL

A. Outline

The copier's control panel consists of the control panel relay PCB, 200x640-dot liquid crystal panel, keypad PCB (including the pilot lamp), and subkey PCB, and it has the following functions:

① Data communication
② LCD processing
③ LCD contrast adjustment
④ Touch switch input

B. Operation

1. Data Communication

The microprocessor (CPU) on the reader controller PCB is used to control data communications.

2. LCD Processing

The microprocessor on the reader controller PCB sends commands to the LCD controller as necessary according to the stored program, and the LCD controller interprets these commands for execution. The LCD controller is also used to turn on and off the indications in response to commands from the program.

In addition, the LCD controller writes display character codes into the display memory RAM in sequence; the data in the display memory RAM is indicated on the display panel in response to the timing signal generated by the LCD controller.

3. Adjusting the LCD Contrast

VR5301 is found on the control panel relay PCB and may be used to adjust the contrast of the display panel.

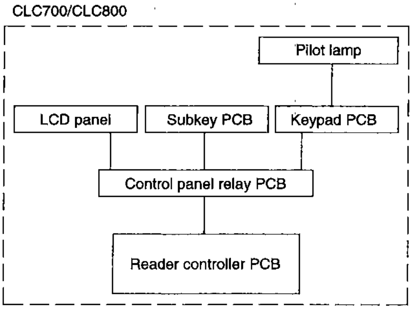


Figure 3-701

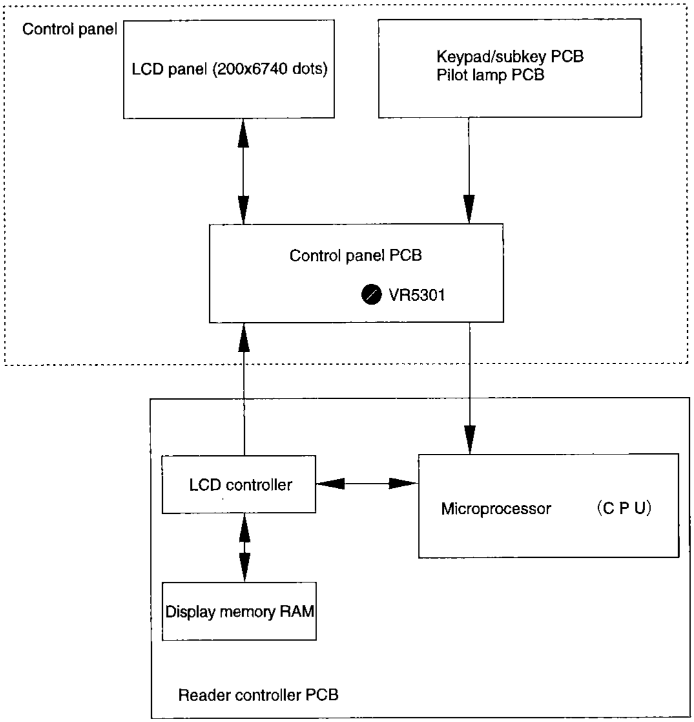

Control panel
LCD panel (200x6740 dots)
Keypad/subkey PCB
Pilot lamp PCB
Control panel PCB
VR5301
LCD controller
Microprocessor (C P U)
Display memory RAM
Reader controller PCB

Figure 3-702

4. Touch Switch Input

The keys on the touch switch panel and the controller PCB on the control panel are connected as shown in Figure 3-703. The touch switch panel consists of two glass sheets coated with transparent conducting membranes with spacers in between, and is formed in a specific pattern of keys (12 columns × 20 rows).

When the face glass plate is pressed by a finger, the two glass sheets come into contact to provide electrical continuity.

In response, a pair of electrodes will let electricity pass, enabling detection of XY coordinates just like a conventional key matrix; in other words, the correspondence between the key scan signal from the control panel controller circuit and the input signal to the control panel controller circuit helps the control panel controller PCB to identify which key has been pressed.

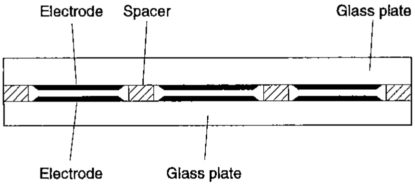

Electrode
Spacer
Glass plate
Electrode
Glass plate

Figure 3-703

VIII. EDITOR

A. Outline

The copier's editor is of a static type, and consists of two tablets and a pen switch; one tablet each is dedicated to reading in horizontal (X) direction and to reading in vertical (Y) direction.

The controller PCB reads points pressed by the pen switch as settings of the area selected by the user.

The copier's tablet has electrode wires at intervals of 6 mm; the contact between these electrode wires and the pen switch by means of static electricity enables identification of points pressed by the pen switch.

B. Operation

When the pen switch presses the tablet, the CPU on the control PCB resorts to the decoder of the appropriate tablet, and applies pulses (1, 2, ..., n, n+1) to the appropriate electrode wires in sequence.

These pulses and the pen switch trigger a static contact, sending voltage fluctuations through the pen switch to the controller PCB. (See Figure 3-801.)

The level of voltage that have been read is converted to digital signals by the A/D converting circuit of the controller PCB; the CPU then makes computations by way of converting them into areas in units of mm, and sends the results to the copier.

Reference:

Since the points of input are computed based on static contacts, a thick original (4 mm max.) may be placed on the editor. However, you may not use conductive materials, or pressure-sensitive paper or carbon-backed paper.

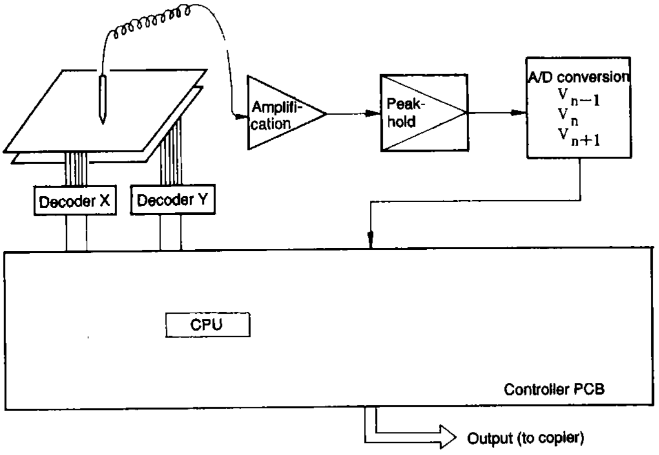
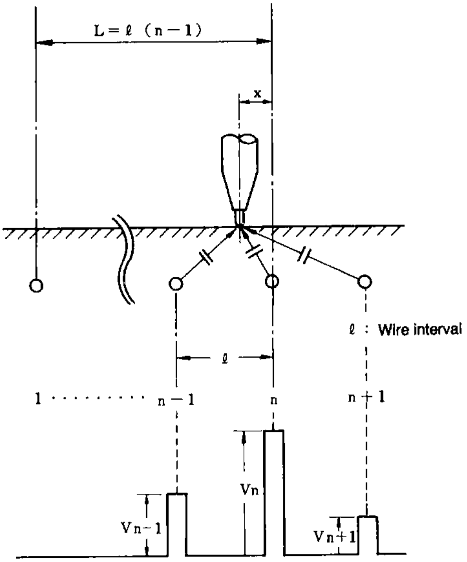

Amplifi-cation
Peak-hold
A/D conversion
V_{n-1}
V_n
V_{n+1}
Decoder X
Decoder Y
CPU
Controller PCB
Output (to copier)

Figure 3-801


L = ℓ (n − 1)
x
ℓ : Wire interval
ℓ
1 ········· n − 1
n
n + 1
Vn
Vn − 1
Vn + 1

Reference:

Pulses are applied to the electrode wires in sequence (1, ..., n–1, n, n+1).

⇩

At nth electrode wire, the maximum value Vn

∴ L : ℓ (n–1)

ℓ : wire interval

⇩

Obtains

$$\frac{V_n-(V_{n-1})}{V_n-(V_{n+1})} = S$$

then, computes x from the data table.

⇩

Obtains

⊕ when between n+1

⊖ when between n–1

Figure 3-802

C. Zero-Adjustment of the Input Coordinates

You must set the DIP switch on the controller PCB according to the label attached to the cable of the tablet (Figure 3-803, -804) whenever you have replaced the tablet or the control PCB inside the editor.

Execute 'EDADJ-X, -Y' in service mode if you note any discrepancy in the input coordinates after having made the settings.

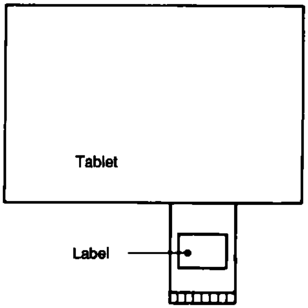
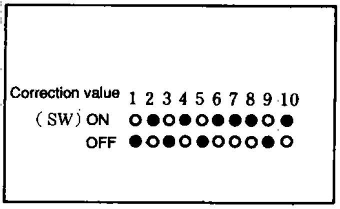


Figure 3-803



Correction value	1	2	3	4	5	6	7	8	9	10
(SW) ON	○	●	○	●	○	●	●	●	○	●
OFF	●	○	●	○	●	○	○	○	●	○

Figure 3-804 Display Sample (●: setting)

IX. FANS

The copier is equipped with 14 fans to discharge ozone, draw stray toner, and cool the machine.

Figure 3-901 shows the locations of these fans; Table 3-901 shows the function, filters used, and orientation of each fan. Figure 3-902 shows when each of the fans turns on.

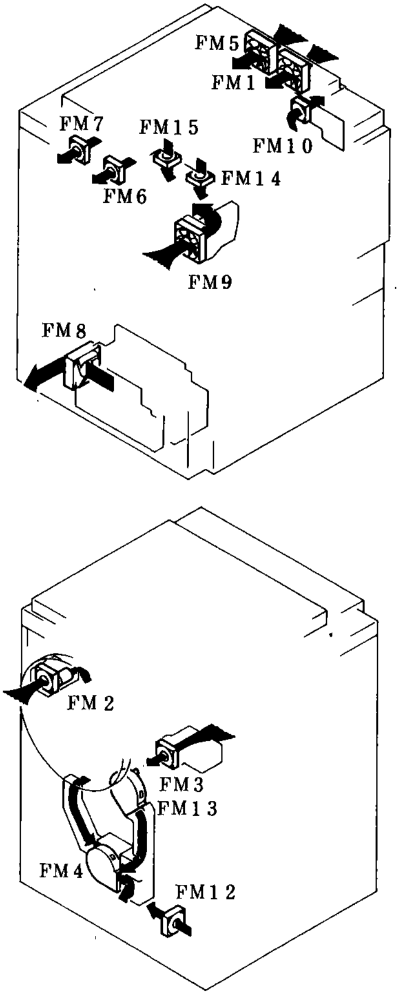
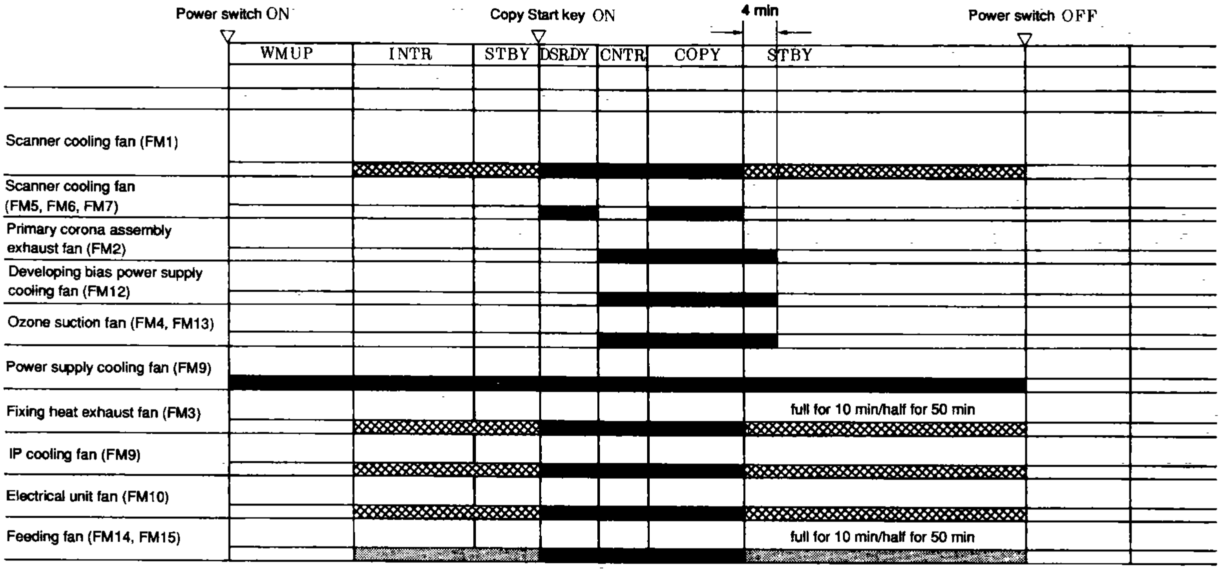

FM5
FM1
FM7
FM15
FM10
FM6
FM14
FM9
FM8
FM2
FM3
FM13
FM4
FM12

Figure 3-901

Notation	Name	Orientation	Filter	Function
FM1	Scanner system cooling fan1	Blow	Air	Prevents overheating of the CCD and copyboard glass by the scanning lamp.
FM2	Primary corona assembly fan (big, small)	Blow	Air	Blows air against the primary corona assembly to prevent collection of toner.
FM3	Fixing assembly heat exhaust fan	Suction	Ozone	Discharges heated air from around the fixing assembly to the outside of the machine.
FM4	Ozone exhaust fan 1	Suction	Ozone Air	Draws toner and ozone from the developing assembly duct and discharges it to the outside of the machine.
FM5	Scanning system cooling fan 2	Blow	Air	Prevents overheating of the CCD and copyboard glass by the scanning lamp.
FM6	Scanning system cooling fan 3	Suction	None	Prevents overheating of the CCD and copyboard glass by the scanning lamp.
FM7	Scanning system cooling fan 4	Suction	None	Prevents overheating of the CCD and copyboard glass by the scanning lamp.
FM8	Power supply cooling fan	Suction	None	Prevents overheating of the DC power supply 1.
FM9	IP cooling fan	Blow	None	Prevents overheating of the IP PCB.
FM10	Electrical equipment cooing fan 1	Blow	None	Cools the electrical equipment.
FM12	Developing bias power supply PCB cooling fan	Blow	None	Blows air against the developing bias power supply PCB to prevent overheating.
FM13	Ozone exhaust fan 2	Suction	Ozone Air	Draws toner and ozone from the developing assembly duct and discharges it to the outside of the machine.
FM14	Feeding fan 1	Blow	None	Keeps paper separated from the transfer drum (particularly curled paper) against the feeding belt to ensure proper feeding.
FM15	Feeding fan 2	Blow	None	Keeps paper separated from the transfer drum (particularly curled paper) against the feeding belt to ensure proper feeding.

Table 3-901


Power switch ON
Copy Start key ON
4 min
Power switch OFF
WMUP
INTR
STBY
DSRDY
CNTR
COPY
STBY
Scanner cooling fan (FM1)
Scanner cooling fan (FM5, FM6, FM7)
Primary corona assembly exhaust fan (FM2)
Developing bias power supply cooling fan (FM12)
Ozone suction fan (FM4, FM13)
Power supply cooling fan (FM9)
Fixing heat exhaust fan (FM3)
full for 10 min/half for 50 min
IP cooling fan (FM9)
Electrical unit fan (FM10)
Feeding fan (FM14, FM15)
full for 10 min/half for 50 min

▩ repeats full for 20 min/half for 50 min

▒ repeats full for 10 min/stop for 50 min

Figure 3-902

X. POWER SUPPLY

A. Power Supply

Figures 3-1001 and -1002 show the distribution of power among the copier's power supplies.

The AC power supplied to the main power supply is turned on and off by the main switch (SW1).

When AC power is supplied to the power supply PCB (DCP1), the PCB generates +27 V, +24 V, +24 Vf, +15 V, +8 V (two channels, for loads and for analog), +5V, and –8 V.

The energy saving switch (SW10) serves to keep the cassette heaters and the like on at all times by the setting of the switch; see Figure 3-113.

Table 3-1001 shows the cassette heaters and others that are turned on by the energy saving switch and main switch.

Since turning off the main switch cuts off DC power to the DC controller circuit and reader unit controller circuit, the copier is equipped with a lithium battery for backing up the RAMs on the PCBs.

B. Protection Mechanisms of the Power Supply Circuit

The main power supply PCB and options PCB are equipped with an overcurrent detecting circuit, which triggers protective mechanisms to cut out the output should a short circuit occur for some reason.

To reset the machine in response to the activation of the protection mechanism, turn off the power switch, disconnect the power plug, remove the cause of activation, and switch the power again; the protection circuit may be reset by keeping the AC power supply of the main power supply PCB off for about 30 sec and turning on the AC power again.

Power saving switch (SW10)	Main switch (SW1)	Drum heater (H4)	Duplexing stacking assembly heater (H3)	Upper cassette/ Lower cassette heater (H5, H6)
Normal position (right)	ON	ON	ON	ON
Normal position (right)	OFF	ON	OFF	ON
Power saving position (left)	ON	ON	ON	ON
Power saving position (left)	OFF	OFF	OFF	OFF

Note: At time of shipment, the power saving switch is set to normal position (right).

Table 3-1001

⚠ **CAUTION:**
Replace the lithium battery only with the one listed in the Parts Catalog. Use of a different battery may present a risk of fire or explosion. The battery may present a fire on chemical burn hazard if mistrated. Do not recharge, disassemble or dispose of it in fire.
Keep the battery out of reach of children and discard any used battery promptly.

Note:
If both upper and lower fixing heaters are on, the drum heater off signal is sent by the DC controller PCB to SSR2, thereby cutting off the power output to the drum heater and cassette heater.

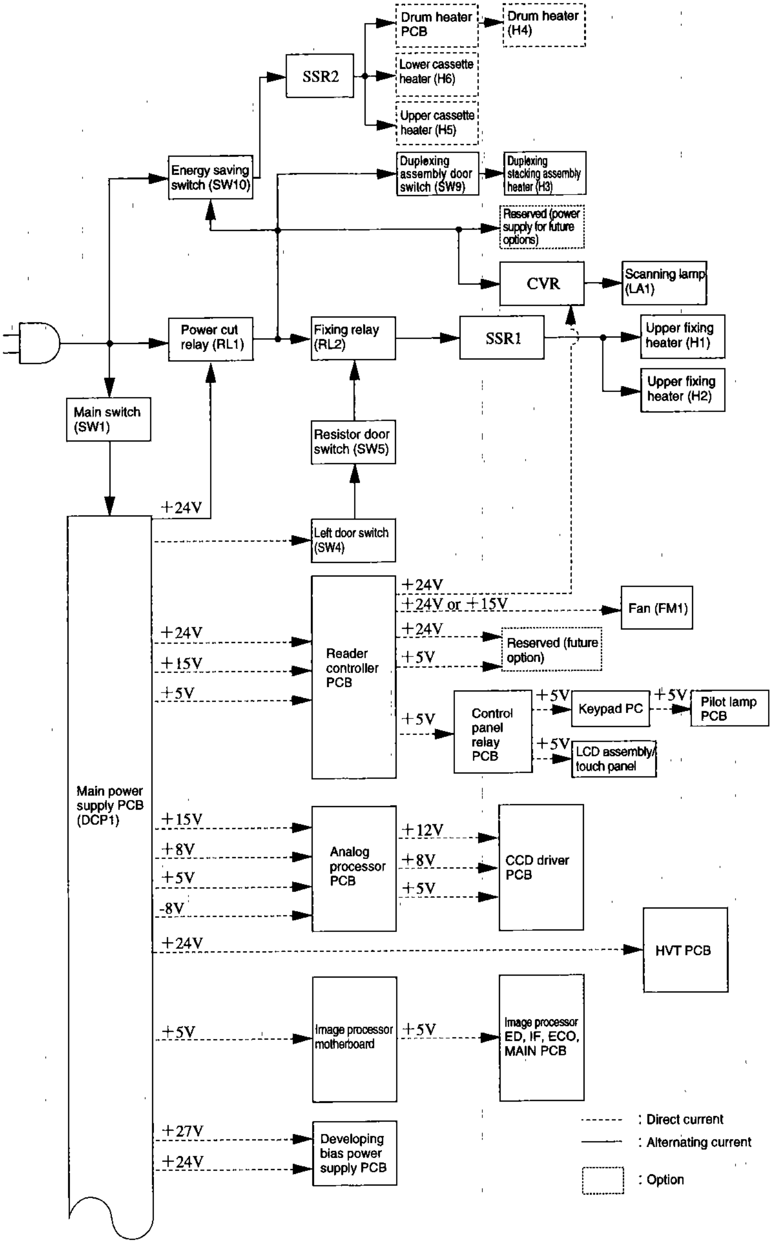

Drum heater PCB
Drum heater (H4)
SSR2
Lower cassette heater (H6)
Upper cassette heater (H5)
Energy saving switch (SW10)
Duplexing assembly door switch (SW9)
Duplexing stacking assembly heater (H3)
Reserved (power supply for future options)
CVR
Scanning lamp (LA1)
Power cut relay (RL1)
Fixing relay (RL2)
SSR1
Upper fixing heater (H1)
Upper fixing heater (H2)
Main switch (SW1)
Resistor door switch (SW5)
+24V
Left door switch (SW4)
+24V
+24V or +15V
Fan (FM1)
+24V
Reserved (future option)
+5V
+24V
+15V
+5V
Reader controller PCB
+5V
Keypad PC
+5V
Pilot lamp PCB
+5V
Control panel relay PCB
+5V
LCD assembly/ touch panel
Main power supply PCB (DCP1)
+15V
+8V
+5V
-8V
Analog processor PCB
+12V
+8V
+5V
CCD driver PCB
+24V
HVT PCB
+5V
Image processor motherboard
+5V
Image processor ED, IF, ECO, MAIN PCB
+27V
+24V
Developing bias power supply PCB
: Direct current
: Alternating current
: Option

Figure 3-1001

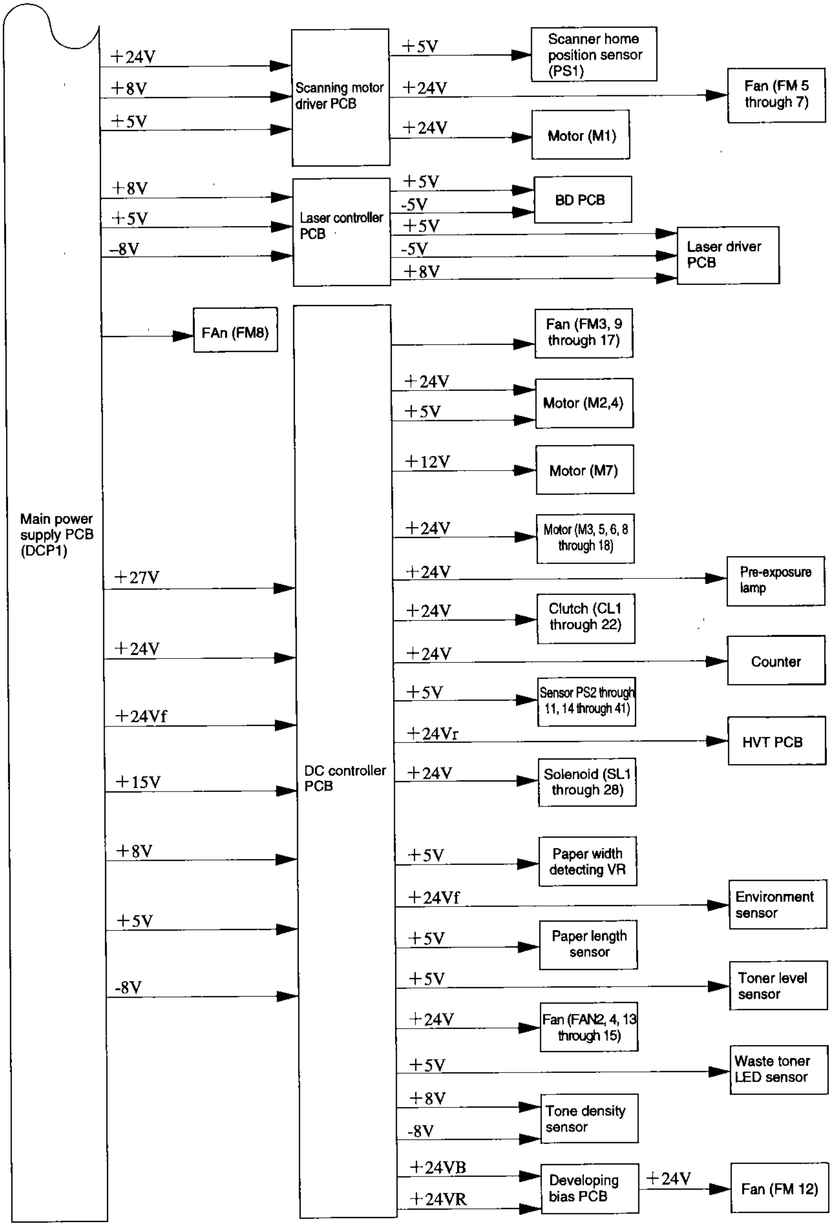

Main power supply PCB (DCP1)
+24V
+8V
+5V
Scanning motor driver PCB
+5V
Scanner home position sensor (PS1)
+24V
Fan (FM 5 through 7)
+24V
Motor (M1)
+8V
+5V
-8V
Laser controller PCB
+5V
-5V
BD PCB
+5V
-5V
+8V
Laser driver PCB
FAn (FM8)
Fan (FM3, 9 through 17)
+24V
+5V
Motor (M2,4)
+12V
Motor (M7)
+24V
Motor (M3, 5, 6, 8 through 18)
+27V
+24V
Pre-exposure lamp
+24V
Clutch (CL1 through 22)
+24V
+24V
Counter
+5V
Sensor PS2 through 11, 14 through 41)
+24Vf
+24Vr
HVT PCB
+15V
DC controller PCB
+24V
Solenoid (SL1 through 28)
+8V
+5V
Paper width detecting VR
+24Vf
Environment sensor
+5V
+5V
Paper length sensor
-8V
+5V
Toner level sensor
+24V
Fan (FAN2, 4, 13 through 15)
+5V
Waste toner LED sensor
+8V
-8V
Tone density sensor
+24VB
+24VR
Developing bias PCB
+24V
Fan (FM 12)

Figure 3-1002

]

XI. SERVICE MODE

A. Outline

The copier's service mode can be classified into the six modes shown in Table 3-1101.

No.	Notation	Description
1	DISPLAY	Control display mode
2	ADJUST	Adjustment mode
3	FUNC	Function mode
4	OPTION	Settings mode
5	TEST	Test print mode
6	COUNTER	Counter mode

Table 3-1101

1. Activating Service Mode and Making Selections

- You cannot activate service mode while the copier is making copies.

1) Press the ∗ key on the control panel.
2) Press the 2 and 8 keys on the keypad at the same time.
3) Press the ∗ key.
   - The screen shown in Figure 3-1101 appears.
4) Select an item on the touch panel.
   - The appropriate screen appears.

2. Deactivating Service Mode

Press the Reset key.

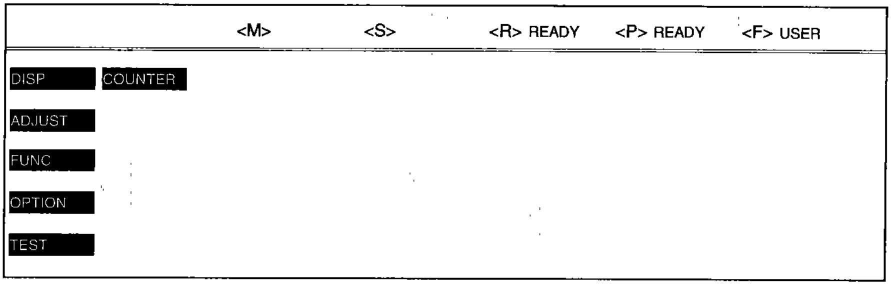


Figure 3-1101

3. RAM Backup

Figure 3-1102 depicts the label attached behind the reader controller cover and the DC controller cover.

Each machine is adjusted at the factory and the value is recorded on the label.

You must go through the following whenever you have replaced the reader controller PCB or the DC controller PCB or if you have replaced any ROMs on the PCBs or cleared the RAMs:

a After Replacing the DC Controller PCB

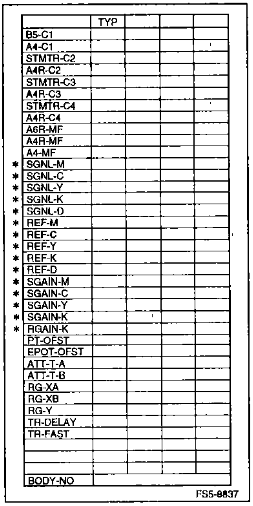
1) Replace the developer (for 4 colors), and execute 'STIR-4' and 'INIT-4' in service mode (FUNC→INSTALL).
2) Record the result (indicated by * in Figure 3-1102 (a)) on the service label; however, for "SGNL-K', record a value obtained by adding '37' to the result.
3) Enter the value recorded on the service label in service mode (FUNC→DC-CON; those not indicated by * in Figure 3-1102 (a)); however, for 'SGNL-K', re-enter the value you have recorded on the label.
4) When you have finished entering all values for each screen, press 'SEND'.
5) Set 'PASCAL' to '1' in service mode (ADJUST→PASCAL).
6) When you have entered all values, turn off and then on the power switch.

b After Clearing the RAM on the DC Controller PCB

1) Enter the value recorded on the service label in service mode (FUNC→DC-CON).
2) When you have entered all values on each screen, press 'SEND'.
3) Set 'PASCAL' to '1' in service mode (ADJUST→PASCAL).
4) When you have entered all values, turn off and then on the power switch.

c After Replacing the ROM on the DC Controller PCB

1) Execute 'RAM-CLR' in service mode (FUNC→DC-CON).
2) Go through the steps given under "After Clearing RAM on the DC Controller PCB".



		TYP			
	B5-C1				
	A4-C1				
	STMTR-C2				
	A4R-C2				
	STMTR-C3				
	A4R-C3				
	STMTR-C4				
	A4R-C4				
	A6R-MF				
	A4R-MF				
	A4-MF				
*	SGNL-M				
*	SGNL-C				
*	SGNL-Y				
*	SGNL-K				
*	SGNL-D				
*	REF-M				
*	REF-C				
*	REF-Y				
*	REF-K				
*	REF-D				
*	SGAIN-M				
*	SGAIN-C				
*	SGAIN-Y				
*	SGAIN-K				
*	RGAIN-K				
	PT-OFST				
	EPOT-OFST				
	ATT-T-A				
	ATT-T-B				
	RG-XA				
	RG-XB				
	RG-Y				
	TR-DELAY				
	TR-FAST				
	BODY-NO				

Figure 3-1102 (a)

d After Clearing the RAM on the Reader Controller PCB

1) Enter the value recorded on the service label in service mode (FUNC→R-CON; indicated by * in Figure 3-1102 (b)).
2) Execute 'FUNC→CCD→AUTO-ADJ' in service mode, and record the result on the service label (indicated by * in Figure 3-1102 (b)).
3) If a projector is installed, execute 'PROJ-CCD' in service mode (FUNC→PRJ-ADJ).
4) When you have entered all values, turn off and then on the power switch.

e After Replacing the ROM on the Reader Controller PCB

1) Execute 'RAM-CLR' in service mode (FUNC→R-CON).
2) Go through the steps under "After Replacing the Reader Controller PCB or Clearing the RAM".

	TYP		
CVR-TYPE			
ADJ-X			
ADJ-Y			
ADJ-S			
ED-ADJ-X			
ED-ADJ-Y			
ADJ-J			
EC-GLASS			
DA-XS			
DA-XE			
DA-YS			
DA-YE			
DS-DOC			
DS-PRJ			
DS-OHP			
ADJ-M			
ADJ-C			
ADJ-Y			
ADJ-K			

		TYP		
	OFST-M			
	OFST-C			
	OFST-Y			
	OFST-K			
	SEG-ADJ			
	BC-ADJ			
	LGCR-IPU			
*	LAMP-DT			
*	GAIN-B			
*	GAIN-G			
*	GAIN-R			
*	TARGET-B			
*	TARGET-G			
*	TARGET-R			

Figure 3-1102 (b)

4. Using Service Mode

Items to Select

a. The items are grouped into 1st-level, 2nd-level, and 3rd-level items, and 1st-level items remain displayed while the machine is in service mode.

b. To select an item, press its text box (reverse video on blue background).

Display

<M>	Indicates a 2nd-level item that has been selected.
<S>	Indicates in terms of N/M (N being the current screen number, and M being the total number of screens).
<P>	Indicates the state of the printer. SERVICE : service operation JAM : paper jam DOOR : door open ERROR : service error COPYING : copying WAITING : initial rotation or the like READY : copying ready while in service operation
<R>	Indicates reader state BUSY : copying not ready while in service operation READY : copying ready while in service operation

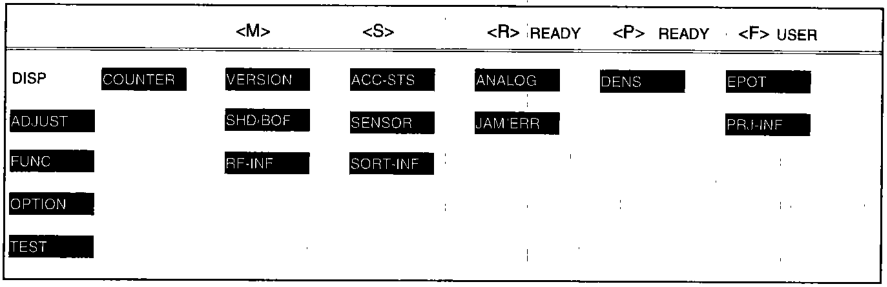
Keys

0 through 9	Enter 0 through 9 as when entering settings.
Reset	Press to end service mode (not valid at time of LCD-CHECK or KEY-CHECK)
Stop	Press to stop an operation.
Two-sided	Enter A(10) when entering settings in hexadecimal notation.
One-Touch Adjust	Enter B(11) when entering settings in hexadecimal notation.
Color Adjust	Enter C(12) when entering settings in hexadecimal notation.
Extended Zoom	Enter D(13) when entering settings in hexadecimal notation.
Frame Erase	Enter E(14) when entering settings in hexadecimal notation.
Color Create	Enter (F(15) when entering settings in hexadecimal notation.

Page Separate	Press for +100 in relation to the absolute value when entering settings.
Image Create	Press for –100 in relation to the absolute value when entering settings.
Marker	Press for +10 in relation to the absolute value when entering settings.
Synthesize	Press for –10 in relation to the absolute value when entering settings.
User Mode	Press for +1 in relation to the absolute value when entering settings.
OHP Interleaf	Press for –1 in relation to the absolute value when entering settings.

Start	Press to executing copying operation.
Pre-Heat	Press to switch between + and – when entering settings.
Interrupt	Press to move to the next 3rd-level screen when multiple 3rd-level screens exist.

B. Control Display Mode (DISPLAY)

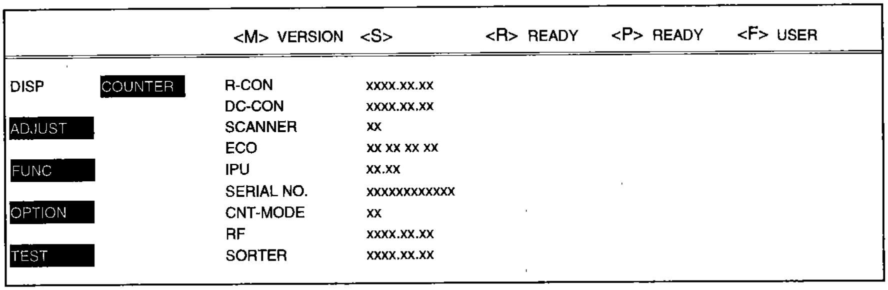


		<M>	<S>	<R> READY	<P> READY	<F> USER
DISP	COUNTER	VERSION	ACC-STS	ANALOG	DENS	EPOT
ADJUST		SHD/BOF	SENSOR	JAM/ERR		PRJ-INF
FUNC		RF-INF	SORT-INF			
OPTION						
TEST						

1	VERSION	Indicates the ROM version.
2	ACC-STS	Indicates the state of the option.
3	ANALOG	Indicates the analog sensor measurements.
4	DENS	Developer density.
5	EPOT	Photosensitive drum surface potential control data.
6	SHD/BOF	Shading/Black Offset Data
7	SENSOR	Sensor/DC controller input port.
8	JAM/ERR	Indicates jam/error.
9*	PRJ-INF	Indicates the state of the projector.
10*	RF-INF	Indicates the state of the RDF.
11*	SORT-INF	Indicates the state of the sorter.

*Not indicated if the relevant option is not installed.

1. ROM Version Display

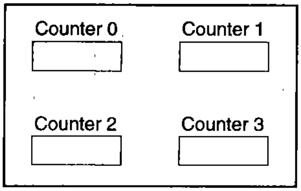


```
                    <M> VERSION  <S>         <R> READY   <P> READY   <F> USER

DISP      COUNTER   R-CON        xxxx.xx.xx
                    DC-CON       xxxx.xx.xx
ADJUST              SCANNER      xx
                    ECO          xx xx xx xx
FUNC                IPU          xx.xx
                    SERIAL NO.   xxxxxxxxxxxx
OPTION              CNT-MODE     xx
                    RF           xxxx.xx.xx
TEST                SORTER       xxxx.xx.xx
```

Item	Description	Remarks
R-CON	Indicates the version of the ROM (Q605, Q616, Q617, Q901) of the reader controller PCB.	XXXX . XX . XX R&D control number ROM version number Language number
DC-CON	Indicates the version of the ROM (IC104) on the DC controller PCB.	
SCANNER	Indicates the version of the ROM (Q648) on the scanner driver PCB.	
ECO	Indicates the versions of the four ROMs on the IP-ECO PCB.	
IPU	Indicates the version of the ROM on the IPU.	
SERIAL No.	Indicates the serial number	For factory.
CNT-MODE	Indicates the type of control of the copy counter; see the next table.	
RF	Indicates the version of the ROM on the RF controller PCB.	XXXX . XX . XX R&D control number ROM version number Language number
SORTER	Indicates the version of the ROM on the sorter controller PCB.	

CNT-MODE in Detail

Counter Control	Counter 0	Counter 1	Counter 2	Counter 3
A	Total copy counter	BK copy counter	Color copy counter	Color printer counter
B	Total copy counter	BK copy counter	Large size color copy counter	Small size color copy counter
C	Total copy counter	Bk copy counter	Color copy counter	
D	Mono copy counter	Bk copy counter	Large size color copy counter	Small size color copy counter
E	Total copy counter	Bk copy counter	Color copy counter (excluds mono copies)	

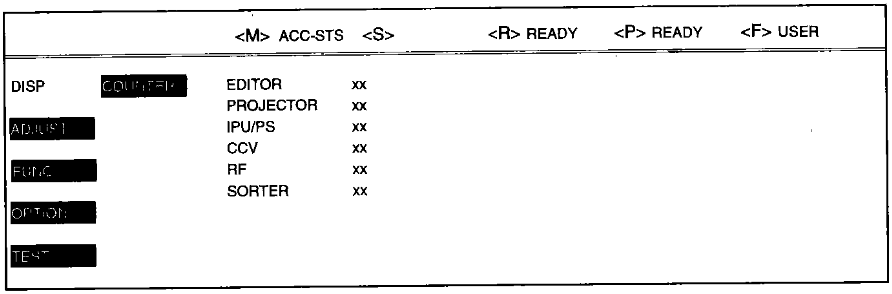


Counter Control	Product Code	
	(TYPE 1)	(TYPE 2)
A	F13-1111/1211	F13-1112/1212
B	F13-1131/1231 F13-1191/1291 F13-1101/1201	F13-1132/1232 F13-1192/1292 F13-1102/1202
C	F13-1151/1251 F13-1161/1261 F13-1181/1281	F13-1152/1252 F13-1162/1262 F13-1182/1282
D	F13-1141/1241	F13-1142/1242 F13-1122
E	F13-1171/1271	F13-1172/1272

Language Number in Detail

	X4	X3	X2	X1
DC controller PCB	0	0	0	0
Reader controller PCB	0	1	1: Japanese 2: English 3: French 4: German 5: Danish 6: Dutch 7: Finish 8: Italian 9: Norwegian A: Portuguese B: Spanish C: Swedish	0: AB 1: Inch 2: A 3: all

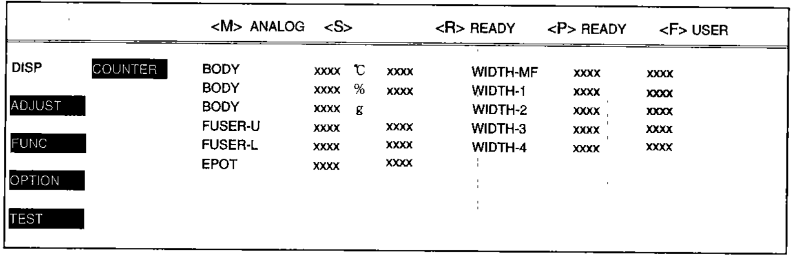
2. Option State Display



```
<M> ACC-STS  <S>          <R> READY     <P> READY     <F> USER

DISP      COUNTER     EDITOR       xx
                      PROJECTOR    xx
ADJUST                IPU/PS       xx
                      CCV          xx
FUNC                  RF           xx
                      SORTER       xx
OPTION

TEST
```

Item	Description
EDITOR	Indicates the connection of the editor. EDITOR=0 : Editor absent; however, I/F PCB present. 1 : Editor present. 2,4 : Editor absent; however, memory error present. 3,5 : Editor present; however, memory error present. 6 : Editor absent. I/F PCB absent, or memory error present. 7 : Editor present. I/F PCB absent, or memory error present.
PROJECTOR	Indicates the connection of the projector. PROJECTOR=0 : Projector absent; however, I/F PCB present. 1 : Projector present. 2 : Projector absent. I/F PCB absent, or memory error present. 3 : Projector present; however, memory error present.
IPU/IPS	Indicates the connection of the IPU/PS-IPU. IPU/PS= 0 : I/F PCB absent. 1 : I/F PCB only present. 2 : PS-IPU present. 3 : PS-IPU, extension board present. 4 : IPU present. 5 : PS-IPU, IPU, extension board present.
CCV	Indicates the connection of the control card V. CCV=0 : CCV disable. 1 : CCV enable.
RF	Indicates the state of connection of the RDF. RF=0: absent. RF=1: present.
SORTER	Indicates the state of connection of the sorter. SORTER=0: absent. 1: Sorter-D1 3: Stapler Sorter-F1 5: Sorter-D1+Buffer Pass Unit 1 7: Stapler Sorter-F1 + Buffer Pass Unit 1

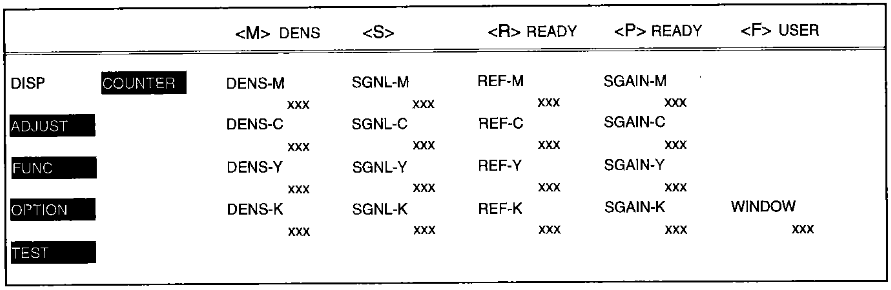
3. Analog Sensor Measurements Display



```
                         <M> ANALOG   <S>           <R> READY    <P> READY    <F> USER

DISP      COUNTER    BODY        xxxx  ℃   xxxx      WIDTH-MF     xxxx       xxxx
                     BODY        xxxx  %   xxxx      WIDTH-1      xxxx       xxxx
ADJUST               BODY        xxxx  g             WIDTH-2      xxxx       xxxx
                     FUSER-U     xxxx      xxxx      WIDTH-3      xxxx       xxxx
FUNC                 FUSER-L     xxxx      xxxx      WIDTH-4      xxxx       xxxx
                     EPOT        xxxx      xxxx

OPTION

TEST
```

Item	Description
BODY	Indicates the machine inside temperature. BODY <u>XXX°C</u> <u>XXX</u> └ Environment sensor output value (0 through 1023) └ Environment sensor output conversion value (°C)
BODY	Indicates the machine inside humidity measured by the environment sensor. BODY <u>XXX%</u> <u>XXX</u> └ Environment sensor output value (0 through 1023) └ Environment sensor output conversion value (%)
BODY	Indicates the machine inside humidity absolute value measured by the environment sensor (g). BODY <u>XX</u> <u>XX</u>g ↑ └ Decimal point Ex) 0750g = 7.50g
FUSER-U	Indicates the upper fixing roller temperature (output of thermistor THM1). FUSER-U <u>XXX</u> <u>XXX</u> └ Output value of THM1 (0 to 1023) └ Output conversion value of THM1 (°C)
FUSER-L	Indicates the upper fixing roller temperature (output of thermistor THM2). FUSER-L <u>XXX</u> <u>XXX</u> └ Output value of THM2 (0 to 1023) └ Output conversion value of THM2 (°C)
EPOT	Indicates the drum surface potential measured by the potential sensor . EPOT <u>XXX</u> <u>XXX</u> └ Output value of the potential sensor (0 through 1023) └ Output conversion value of the potential sensor (V)
WIDTH-MF WIDTH-1 WIDTH-2 WIDTH-3 WIDTH-4	Indicates the paper width conversion value (mm) of each cassette and multifeeder. WIDTH-2 <u>XXXX</u> <u>XXXX</u> └ Output value └ Replacement value (mm)

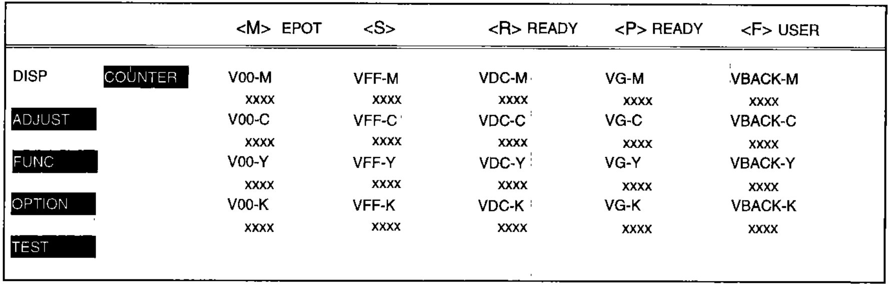
4. Developer Density Display



```
                      <M> DENS    <S>          <R> READY    <P> READY    <F> USER

DISP      COUNTER     DENS-M      SGNL-M       REF-M        SGAIN-M
                            xxx          xxx          xxx          xxx
ADJUST                DENS-C      SGNL-C       REF-C        SGAIN-C
                            xxx          xxx          xxx          xxx
FUNC                  DENS-Y      SGNL-Y       REF-Y        SGAIN-Y
                            xxx          xxx          xxx          xxx
OPTION                DENS-K      SGNL-K       REF-K        SGAIN-K      WINDOW
                            xxx          xxx          xxx          xxx          xxx
TEST
```

Item	Description	Remarks
DENS-M DENS-C DENS-Y DENS-K	Indicates the density of the developer of each color inside the developing assembly. + : higher than the target value. – : lower than the target value. SGNL and REF stored in 'ATR-INIT' and value computed by SGNL and REF on the screen.	Unit: 0.1%
SGNL-M SGNL-C SGNL-Y SGNL-K	Indicates the measurement (AD conversion value) of the current developer density of each color.	Measured for each copy.
REF-M REF-C REF-Y REF-K	Indicates the measurement (AD conversion value) of the reference signal of each color.	Measured for each copy.
SGAIN-M SGAIN-C SGAIN-Y SGAIN-K	Indicates the gain signal (initial value) of each color (AD conversion value).	
WINDOW	Indicates the correction coefficient of soiling of the window. The value decreases as the window of the black toner density sensor becomes soiled.	Standard: 100% Normal if between 76 and 124.

5. Photosensitive Drum Surface Potential Control Data

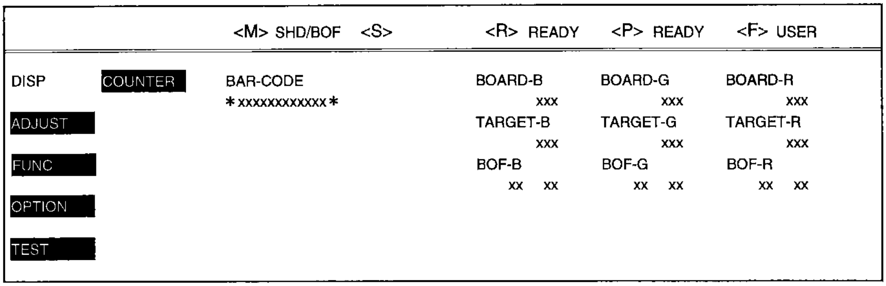


```
                          <M> EPOT     <S>        <R> READY    <P> READY    <F> USER

DISP      COUNTER        V00-M        VFF-M       VDC-M        VG-M         VBACK-M
                           xxxx         xxxx        xxxx         xxxx         xxxx
ADJUST                   V00-C        VFF-C       VDC-C        VG-C         VBACK-C
                           xxxx         xxxx        xxxx         xxxx         xxxx
FUNC                     V00-Y        VFF-Y       VDC-Y        VG-Y         VBACK-Y
                           xxxx         xxxx        xxxx         xxxx         xxxx
OPTION                   V00-K        VFF-K       VDC-K        VG-K         VBACK-K
                           xxxx         xxxx        xxxx         xxxx         xxxx
TEST
```

Item	Description	Remarks
VOO=M VOO=C VOO=Y VOO=K	Indicates the target value of V_D (when laser output is 00).	Unit: V
VFF=M VFF=C VFF=Y VFF=K	Indicates the target value of V_L (when laser output is ff).	Unit: V
VDC=M VDC=C VDC=Y VDC=K	Indicates the target value of Vdc (developing bias DC component).	Unit: V
VG=M VG=C VG=Y VG=K	Indicates the target value of Vg (grid bias).	Unit: V
VBACK=M VBACK=C VBACK=Y VBACK=K	Indicates the de-fogging potential setting.	–7 ~ 7

- The measurements of V00 and VFF may be checked by 'EPC' under 'FUNC'.

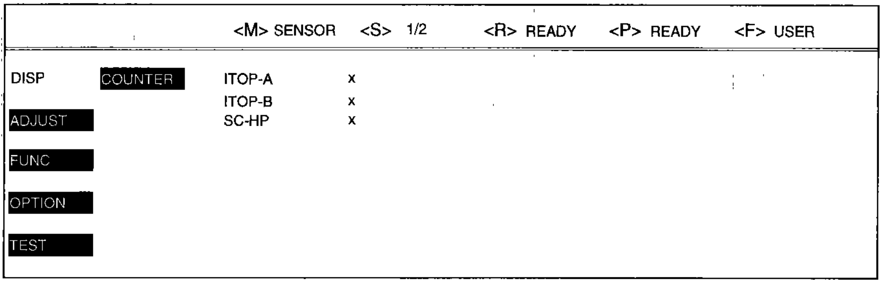
6. Shading/Black Offset Data



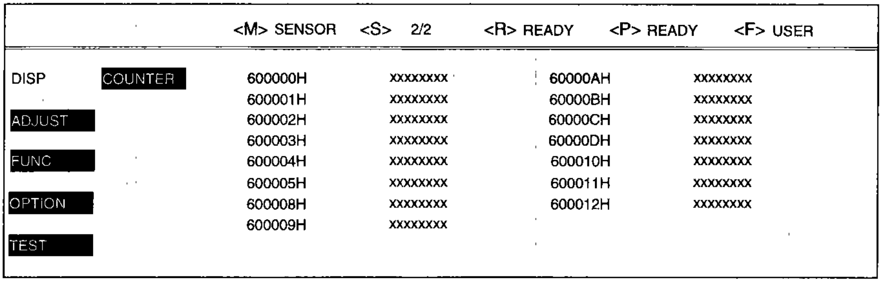
```
                           <M> SHD/BOF   <S>          <R> READY     <P> READY     <F> USER

DISP      COUNTER          BAR-CODE                   BOARD-B       BOARD-G       BOARD-R
                           *xxxxxxxxxxxx*                   xxx           xxx           xxx
ADJUST                                                TARGET-B      TARGET-G      TARGET-R
                                                            xxx           xxx           xxx
FUNC                                                  BOF-B         BOF-G         BOF-R
                                                        xx   xx       xx   xx       xx   xx
OPTION

TEST
```

Item	Description	Remarks
BAR-CODE	Indicates the bar-code setting of the standard white plate.	Indicated only after executing 'AUTO-ADJ' of 'CCD' under 'FUNC'. (not indicated by turning the power off and then on)
BOARD-B BOARD-G BOARD-R	Indicates the output of each CCD when the the standard white plate is read. (output after A/D conversion)	
TARGET-B TARGET-G TARGET-R	Indicates the shading target value.	
BOF-B BOF-G BOF-R	Indicates the output of each CCD when the scanning lamp is off. odd bit/even bit	

7. Sensor/DC Controller Input Port



```
<M> SENSOR   <S>  1/2      <R> READY    <P> READY    <F> USER

ITOP-A      x
ITOP-B      x
SC-HP       x
```



```
<M> SENSOR   <S>  2/2      <R> READY    <P> READY    <F> USER

600000H     xxxxxxxx      60000AH     xxxxxxxx
600001H     xxxxxxxx      60000BH     xxxxxxxx
600002H     xxxxxxxx      60000CH     xxxxxxxx
600003H     xxxxxxxx      60000DH     xxxxxxxx
600004H     xxxxxxxx      600010H     xxxxxxxx
600005H     xxxxxxxx      600011H     xxxxxxxx
600008H     xxxxxxxx      600012H     xxxxxxxx
600009H     xxxxxxxx
```

Item	Description	Remarks
ITOP-A	Indicates the output of side A sensor (PS2).	When PS2 is detecting the transfer drum.
ITOP-B	Indicates the output of the side B sensor (PS3).	When PS3 is detecting the transfer drum.
SC-HP	Indicate the output of the scanner home position sensor (PS1).	When the scanner is at home position.
600000 to 600012H	Indicates the input port of the DC controller PCB (600000H through 600012H).	

NO1

Address		Item	Description	Remarks
600000H	7	PS43D	Pre-phtosensitive drum cleaner paper sensor (PS43; TYPE 2 only)	Paper present: 1
	6	—	For future use.	—
	5		Buffer pass unit inlet paper sensor	Paper present: 1
	4		Buffer pass unit locking cam sensor	At HP: 1
	3	DLVRY–0	External delivery sensor (PS27)	Paper present: 0
	2	DLVRY_1	Internal delivery sensor (PS11)	Paper present: 1
	1	SPRT	Separation sensor (PS6)	Paper present: 1
	0	TRANS_2	Post-transfer paper sensor (PS5)	Paper present: 1
600001H	7	TRANS_1	Pre-transfer paper sensor (PS4)	Paper present: 1
	6	RGST	Registration paper sensor (PS41)	Paper present: 1
	5	OHP	OHP sensor (PS40)	Paper present: 1
	4	MFPPD	Multifeeder pick-up sensor (PS8)	Paper present: 1
	3	PS19D	Pick-up vertical path 1A sensor (PS19; CLC700)	Paper present: 1
	2	PS26D	Pick-up vertical path 1B sensor (PS26; CLC800)	Paper present: 1
	1	PS24D	Pick-up vertical path 2 sensor (PS24; CLC800)	Paper present: 1
	0	PS25D	Pick-up vertical path 3 sensor (PS25; CLC800)	Paper present: 1
600002H	7	—	For future use.	—
	6	—	For future use.	—
	5	MFPD	Multifeeder paper sensor (PS14)	Paper present: 0
	4	DUP_PD	Duplexing unit stacking assembly paper sensor (PS32; CLC800)	Paper present: 0
	3	C4PD	Cassette 4 paper sensor (PS23; CLC800)	Paper present: 1
	2	C3PD	Cassette 3 paper sensor (PS22; CLC800)	Paper present: 1
	1	C2PD	Cassette 2 paper sensor (PS18; CLC700)	Paper present: 1
	0	C1PD	Cassette 1 paper sensor (PS16)	Paper present: 1

NO2

Address		Item	Description	Remarks
600003H	7	—	For future use.	—
	6	—	For future use.	—
	5	PS33D	Duplexing unit feeding assembly paper sensor (PS33; CLC800)	Paper present: 0
	4	PS31D	Duplexing unit reversing assembly outlet paper sensor (PS31; CLC800)	Paper present: 0
	3	PS30D	Duplexing unit post-reversal paper sensor (PS30; CLC800)	Paper present: 1
	2	PS29D	Duplexing unit pre-reversal paper sensor (PS29; CLC800)	Paper present: 1
	1	PS39D	Delivery vertical path 2 sensor (PS39; CLC800)	Paper present: 1
	0	PS28D	Delivery path 1 sensor (PS28; CLC800)	Paper present: 1
600004H	7	—	For future use.	—
	6	—	For future use.	—
	5	M6RDY	Pick-up motor READY	READY: 0
	4	—	For future use.	—
	3	LSMRDY	Scanning motor READY	READY: 0
	2	FXMRDY	Fixing motor READY	READY: 0
	1	DRMRDY	Drum motor READY	READY: 0
	0	MMRDY	Main motor READY	READY: 0
600005H	7	—	—	—
	6	—	—	—
	5	—	—	—
	4	—	—	—
	3	—	—	—
	2	—	—	—
	1	—	—	—
	0	—	—	—

NO3

Address		Item	Description	Remarks
600008H	7		Pre-phtosensitive drum cleaner paper sensor (PS43) presence / absence	Present: 1
	6	—	For future use.	—
	5	—	For future use.	—
	4	—	Presence / absence of buffer	Present: 1
	3	—	Transfer assembly frame door connector	Connected: 0
	2	—	Duplexing drawer connector	Connected: 0
	1	—	Transfer assembly drawer connector	Connected: 0
	0	—	Fixing assembly drawer connector	Connected: 0
600009H	7	—	For future use.	—
	6	—	For future use.	—
	5		Buffer door switch	Door open: 1
	4	REV_DR	Reversal door switch	Door open: 1
	3	FEED_DR	Feed door switch	Door open: 1
	2	LEFT_DR	Left door switch	Door open: 0
	1	RGHT_DR	Right door sensor	Door open: 0
	0	DEL_DR	Delivery door sensor	Door open: 0
60000AH	7	—	—	—
	6	—	—	—
	5	—	—	—
	4	—	—	—
	3	—	—	—
	2	—	—	—
	1	—	—	—
	0	—	—	—
60000BH	7	C4SZ1	Cassette 4 paper length sensor (CLC800)	PS106 ON: 1
	6	C4SZ0	Cassette 4 paper length sensor 0 (CLC800)	PS105 ON: 1
	5	C3SZ1	Cassette 3 paper length sensor 1 (CLC800)	PS104 ON: 1
	4	C3SZ0	Cassette 3 paper length sensor 0 (CLC800)	PS103 ON: 1
	3	C2SZ1	Cassette 2 paper length sensor 1 (CLC700)	PS102 ON: 1
	2	C2SZ0	Cassette 2 paper length sensor 0 (CLC700)	PS101 ON: 1
	1	—	—	—
	0	—	—	—

NO4

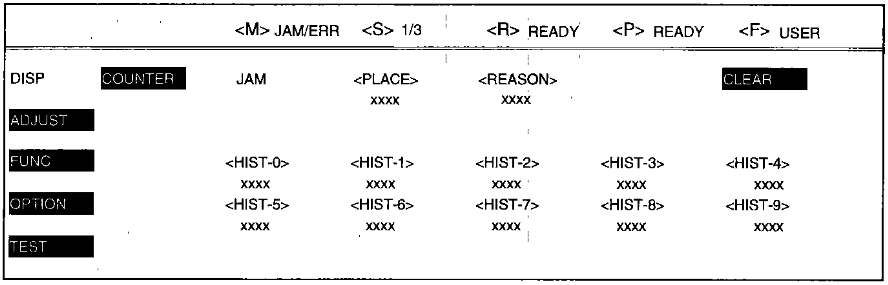
Address		Item	Description	Remarks
60000CH	7	WTBD	Delivery toner feeding screw lock detection switch (MS4)	Screw lock: 0
	6	WTONER	Waste toner full sensor (PS42)	Waste toner full: 1
	5	WEBD	Fixing cleaning belt level sensor (PS10)	Belt absent: 1
	4	OILEP	Fixing oil level sensor (PS9)	Oil absent: 0
	3	BKTEP	Bk toner level sensor (TS4)	Low: 0
	2	YTEP	Y toner level sensor (TS3)	Low: 0
	1	CTEP	C toner level sensor (TS2)	Low: 0
	0	MTEP	M toner level sensor (TS1)	Low: 0
60000DH	7	—	Polishing roller drive motor overcurrent detection	Overcurrent: 1
	6	—	Cleaning assembly reciprocating motor overcurrent	Overcurrent: 0
	5	—	Hopper motor overcurrent detection	Overcurrent: 0
	4	—	Transfer drum cleaner motor overcurrent detection	Overcurrent: 0
	3	—	Brush drive motor cover current detection	Overcurrent: 1
	2	—	For future use.	—
	1	—	—	—
	0	—	—	—
600010H	7	C4LFU	Cassette 4 lifter sensor (PS21; CLC800)	Lifter up: 1
	6	C3LFU	Cassette 3 lifter sensor (PS20; CLC800)	Lifter up: 1
	5	C2LFU	Cassette 2 lifter sensor (PS17; CLC700)	Lifter up: 1
	4	C1LFU	Cassette 1 lifter sensor (PS15)	Lifter up: 1
	3	PGHP	Paper jogging guide home position sensor (PS34; CLC700)	At HP: 1
	2	BMTRHP	Brush drive motor home position sensor (PS7)	At HP: 1
	1	A-LEG	A sensor (PS2)	On side A: 1
	0	B-LEG	Side B sensor (PS3)	On side B: 1

NO5

Address		Item	Description	Remarks
600011H	7	—	Fixing heater error low	Error: 1
	6	—	Fixing heater error up	Error: 1
	5	—	Shutoff error	Error: 1
	4	—	SSR1 error	Error: 1
	3	—	SSR2 error	Error: 1
	2	—	For future use.	—
	1	DRUMHP	Photosensitive drum home position sensor (PS38)	At HP: 1
	0	KEYSW	Key switch	Key switch on: 0
600012H	7	—	Counter mode 4	Counter up: 1
	6	—	Counter mode 3	Counter up: 1
	5	—	Counter mode 2	Counter up: 1
	4	—	Counter mode 1	Counter up: 1
	3	—	For future use.	—
	2	—	For future use.	—
	1	—	For future use.	—
	0	—	For future use.	—

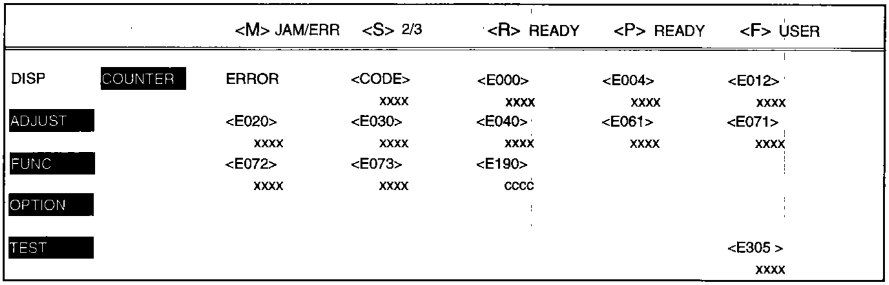
8. Jam/E Display

- 1st page (jam history)



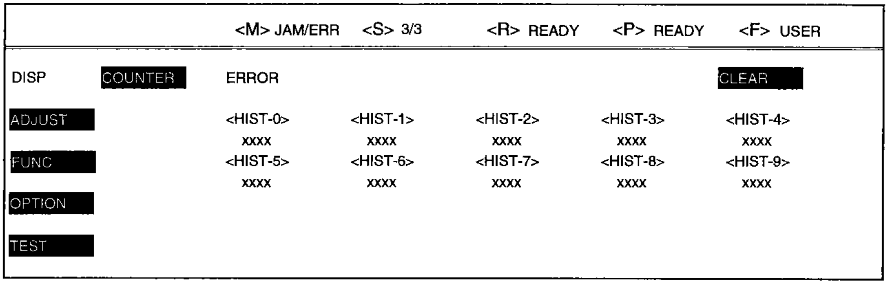
		<M> JAM/ERR	<S> 1/3	<R> READY	<P> READY	<F> USER
DISP	COUNTER	JAM	<PLACE> xxxx	<REASON> xxxx		CLEAR
ADJUST						
FUNC		<HIST-0> xxxx	<HIST-1> xxxx	<HIST-2> xxxx	<HIST-3> xxxx	<HIST-4> xxxx
OPTION		<HIST-5> xxxx	<HIST-6> xxxx	<HIST-7> xxxx	<HIST-8> xxxx	<HIST-9> xxxx
TEST						

- 2nd page (E indication)



		<M> JAM/ERR	<S> 2/3	<R> READY	<P> READY	<F> USER
DISP	COUNTER	ERROR	<CODE> xxxx	<E000> xxxx	<E004> xxxx	<E012> xxxx
ADJUST		<E020> xxxx	<E030> xxxx	<E040> xxxx	<E061> xxxx	<E071> xxxx
FUNC		<E072> xxxx	<E073> xxxx	<E190> cccc		
OPTION						
TEST						<E305 > xxxx

- 3rd page (E indication history)



		<M> JAM/ERR	<S> 3/3	<R> READY	<P> READY	<F> USER
DISP	COUNTER	ERROR				CLEAR
ADJUST		<HIST-0> xxxx	<HIST-1> xxxx	<HIST-2> xxxx	<HIST-3> xxxx	<HIST-4> xxxx
FUNC		<HIST-5> xxxx	<HIST-6> xxxx	<HIST-7> xxxx	<HIST-8> xxxx	<HIST-9> xxxx
OPTION						
TEST						

Item	Description
<PLACE>	Indicates the location of a jam (paper position) in code.
<REASON>	Indicates the cause/location of a jam; see next page.
<CLEAR>	CLEAR on page 1/3 clears the jam history. CLEAR on page 3/3 clears the error code (E indication) history.
<HIST-0> to <HIST-9>	Indicates the history of jams (REASON). • HIST-0 represents the most recent jam detected.
<CODE>	Indicates the results of self diagnosis (E indication).
<E000> <E004> <E012> <E020> <E030> <E040> <E061> <E071> <E072> <E073> <E190> <E305>	Details of E000 Details of E004 Details of E012 Details of E020 Details of E030 Details of E040 Details of E061 Details of E071 Details of E072 Details of E073 Details of E190 Details of E305 See p. 3-292.
<HIST-0> to <HIST-9>	Indicates the history of error codes (E indication). • HIST-0 represents the most recent error indication.

PLACE Codes

The PLACE codes are expressed in hexadecimal notation. You may convert them into binary notation to identify the location of the jam.

- 00H = 0000000000000000

BIT 0
BIT 8
BIT 15

BIT	JAM Location
BIT 0 = 1	near cassette 1
BIT 1 = 1	near cassette 2
BIT 2 = 1	near cassette 3
BIT 3 = 1	near cassette 4
BIT 4 = 1	near multifeeder assembly
BIT 5 = 1	near duplexing unit
BIT 6 = 1	near pickup vertical path
BIT 7 = 1	near multifeeder feeding assembly
BIT 8 = 1	near pre-registration roller
BIT 9 = 1	near transfer drum
BIT 10 = 1	near separation assembly
BIT 11 = 1	near fixing assembly
BIT 12 = 1	near delivery vertical path
BIT 13 = 1	near duplexing tray
BIT 14 = 1	near buffer unit
BIT 15 = 1	near sorter

For instance, if 'JAM, PLACE=2100H', 2100H = 0010 0001 0000 0000 , pointing to a point between the duplexing tray assembly and the pre-registration roller.

REASON Codes

first 2 digits: jam Cause code	Jam
01xx	Delay jam
02xx	Stationary jam *
03xx	Paper at time of power-on or opening/closing of front/ pick-up assembly/delivery assembly door
04xx	Wrong point of attraction jam
05xx	Sorter jam
FFxx	Opening of front/pick-up assembly/delivery assembly door during copying assembly

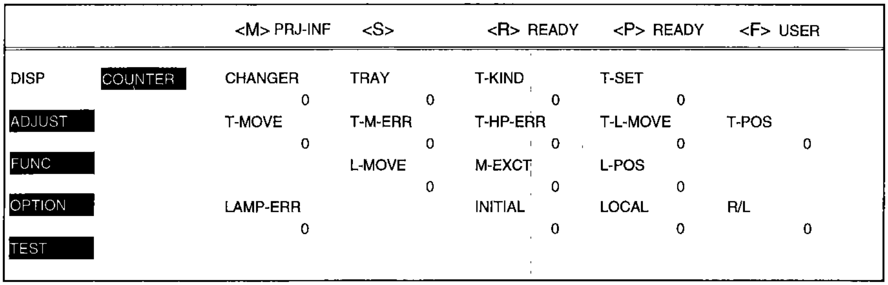
1. High-Order 2 Digits 01, 02, or 03.

last 2 digits: jam Sensor code	Sensor
xx01	Vertical path assembly from cassette 4
xx02	Vertical path assembly from cassette 3
xx03	Vertical path assembly from duplexing unit
xx04	Vertical path assembly from cassette 2
xx05	No. 1 feeding assembly (horizontal path assembly)
xx06	For future use.
xx07	Pre-registration sensor
xx08	Post-transfer sensor
xx09	Pre-transfer sensor
xx0A	Separation sensor
xx0B	Internal delivery assembly
xx0C	External delivery assembly
xx0D	Delivery vertical path assembly 1
xx0E	Delivery vertical path assembly 2
xx0F	Pre-reversal sensor
xx10	Post-reversal sensor
xx11	Reversing assembly outlet sensor
xx12	Duplexing feeding assembly sensor
xx18	Buffer sensor assembly
xx20	Pre-cleaner paper sensor *

2. High-Order 2 Digits 05

last 2 digits: jam Sensor code	Sensor
xx03	Feeding delay jam
xx04	Feeding stationary jam
xx06	Staple jam
xx07	Power-on jam
xx08	Door open (feeding)
xx09	Door open (non feeding)
xx0A	Outside bin jam

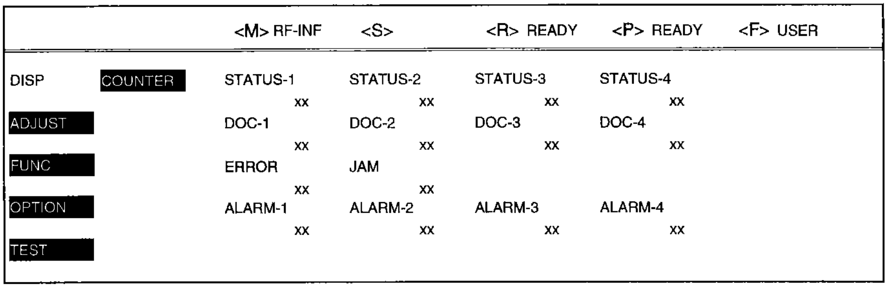
9. Projector State Display



```
                           <M> PRJ-INF    <S>          <R> READY    <P> READY    <F> USER

DISP        COUNTER        CHANGER        TRAY         T-KIND       T-SET
                                 0              0            0            0
ADJUST                     T-MOVE         T-M-ERR      T-HP-ERR     T-L-MOVE     T-POS
                                 0              0            0            0            0
FUNC                                      L-MOVE       M-EXCT       L-POS
                                                0            0            0
OPTION                     LAMP-ERR                    INITIAL      LOCAL        R/L
                                 0                           0            0            0
TEST
```

Item	Description	State
CHANGER	Presence/absence of rotary changer	1: present
TRAY	Presence/absence of slide tray	1: present
T-KIND	Type of tray	1: 140 0: 80
T-SET	Presence of slide	1: present
T-MOVE	Tray movement	1: moving
T-M-ERR	Tray drive mechanical error	1: error
T-HP-ERR	Tray home position error	1: error
T-L-MOVE	Tray local movement	1: moving
T-POS	Tray position	0: home position 1: increasing by 1 for each feeding operation
L-MOVE	Lens movement	1: moving
M-EXCT	Motor excitation	1: excited
L-POS	Lens position	0: home position
LAMP-ERR	Lamp open-circuit detection	1: open circuit
INITIAL	Initialization	1: initializing
LOCAL	Local movement	1: moving
R/L	Remote/local	0: remote 1: local

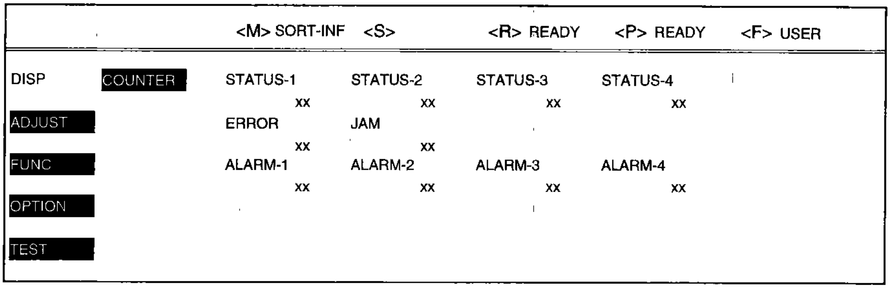
10. RDF State Display



```
              <M> RF-INF    <S>          <R> READY    <P> READY    <F> USER

STATUS-1      STATUS-2      STATUS-3     STATUS-4
        xx            xx            xx           xx
DOC-1         DOC-2         DOC-3        DOC-4
        xx            xx            xx           xx
ERROR         JAM
        xx            xx
ALARM-1       ALARM-2       ALARM-3      ALARM-4
        xx            xx            xx           xx
```

Item	Description
STATUS-1/2/3/4	For R&D
DOC-1/2/3/4	For R&D
ERROR	Indicates the error code from the RDF controller PCB. 01H: equivalent of E401 02H: equivalent of E402 03H: equivalent of E403 04H: equivalent of E404 05H: equivalent of E405 06H: no equivalent 07H: equivalent of E407 11H: equivalent of E411 21H: equivalent of E400
JAM	See the RDF-E1 Service Manual.
ALARM-1/2/3/4	Indicates the alarm code from the RDF controller PCB. 01H: re-circulating bar idle swing 02H: no equivalent 03H: separation failed 04H: separation skew 05H: no equivalent

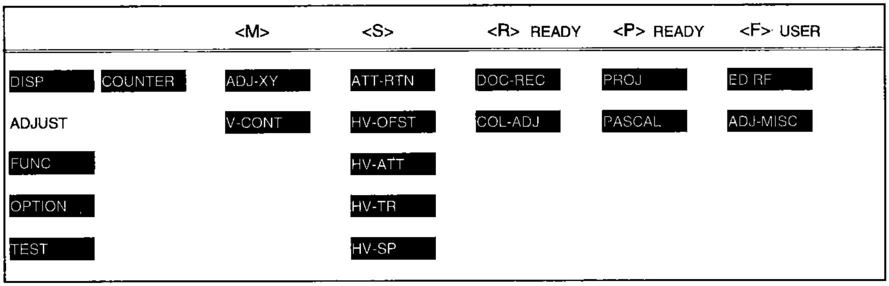
11. Sorter state Display



```
                   <M> SORT-INF  <S>          <R> READY     <P> READY     <F> USER

DISP    COUNTER    STATUS-1      STATUS-2      STATUS-3      STATUS-4
                          XX            XX            XX            XX
ADJUST             ERROR         JAM
                          XX            XX
FUNC               ALARM-1       ALARM-2       ALARM-3       ALARM-4
                          XX            XX            XX            XX
OPTION

TEST
```

Item	Description
STATUS-1/2/3/4	For R&D
ERROR	See the Stapler Sorter-F1/Sorter-D1 Service Manual.
JAM	Indicates the jam code from the sorter controller PCB. 03H: feeding delay jam 04H: feeding stationary jam 06H: staple jam 07H: power-on jam 08H: door open jam (feeding) 09H: door open jam (non feeding)
ALARM-1/2/3/4	Indicates the alarm code from the sorter controller PCB. ALARM-1 02H: overstacking ALARM-2 02H: staple jam 03H: stapler safery protective mechanism on 05H: stapling overstacking 07H: mixed paper sizes (horizontal) 08H: no stapling unit 0AH: no staple ALARM-3/4 For future

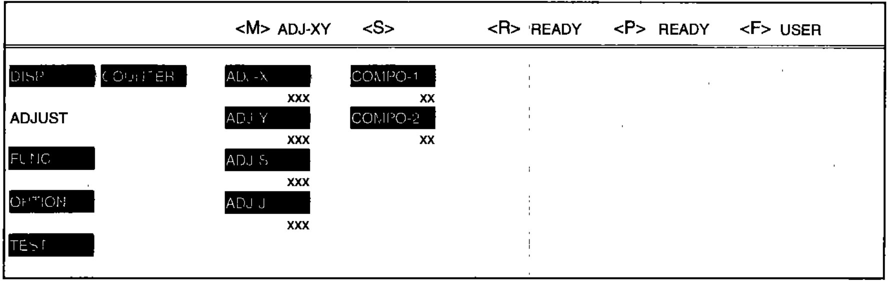
C. Adjustment Mode (ADJUST)


<M>
<S>
<R> READY
<P> READY
<F> USER
DISP
COUNTER
ADJ-XY
ATT-RTN
DOC-REC
PROJ
ED RF
ADJUST
V-CONT
HV-OFST
COL-ADJ
PASCAL
ADJ-MISC
FUNC
HV-ATT
OPTION
HV-TR
TEST
HV-SP

1	ADJ-XY	Adjustment of the image read start position.
2	ATT-RTN	Adjustment of attraction rotation.
3	DOC-REC	Adjustment of the original detection area/slice level.
4	PROJ*	Projector area adjustment.
5	ED/RF	Adjustment of the editor.
6	V-CONT	Adjustment of the original detection area/slice level.
7	HV-OFST	Adjustment of the high-voltage output of attraction/transfer/separation.
8	COL-ADJ	Correction of the color balance adjustment for the user.
9	PASCAL	Decision on use or not use the data obtained by automatic gradation correction control and display of data related to automatic gradation correction control.
10	ADJ-MISC	(Adjustment other than the above.)
11	HV-ATT	Fine-adjustment of the attraction high-voltage output by condition.
12	HV-TR	Fine-adjustment of the transfer high-voltage output by condition.
13	HV-SP	Fine-adjustment of the separation high-voltage output by condition.

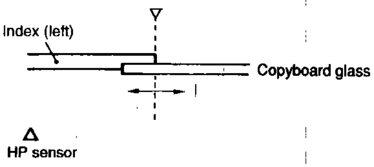
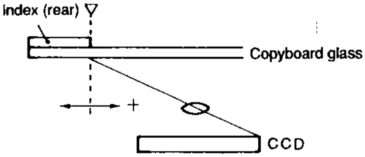
*Not indicated if the projector is not installed.

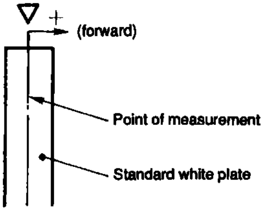
1. Adjusting the Image Read Position Start Position



<M> ADJ-XY <S> <R> READY <P> READY <F> USER

DISP COUNTER ADJ-X xxx COMPO-1 xx
ADJUST ADJ-Y xxx COMPO-2 xx
FUNC ADJ-S xxx
OPTION ADJ-J xxx
TEST

Item	Description	Settings
ADJ-X	Make adjustments so that the image read start position matches the reference point on the copyboard glass. Fine-Adjusting the Distance between the Scanner HP Sensor and the Read Start Position • unit: number of steps of the stepping motor. • See next page. 	−200 ~ +200 (−3.9 ~ +3.9mm) unit: 0.107 mm (approx.)
ADJ-Y	Fine-Adjusting the CCD Read Start Position • unit: pixels • See next page. 	−100 ~ +100 (−2.5 ~ +2.5mm) unit: 0.06 mm (approx.)
ADJ-J	Adjusting the Initial Rotation Period of the Scanning Motor	0 ~ +500 unit: 0.1 ms (approx.)

Item	Description	Settings
ADJ-S	Fine-Adjusting the Position of Measuring the Standard White Plate for Shading Correction Data • unit: number of steps of the stepping motor. • Scratches or dirt on the standard white plate vertical white lines on copies conspicuous; this adjustment shifts the point of measurement taken by ADJ-S.  + (forward) Point of measurement Standard white plate	0 ~ 45 (0 ~ 4.8mm) unit: 0.107 mm (approx.)
COMPO-1	For R & D (not used)	
COMPO-2	For R & D (not used)	

Adjusting the Image Read Start Position

You must check the point of attraction before making this adjustment.

1) Before activating service mode, set the original detection to 'OFF'.
2) Bring up the ADJ-XY screen, and press the Copy Start key.
    - the appropriate copy mode is set automatically, and a copy is made with a shift of about 50 mm as shown in Figure 3-1103.
3) If any part of the image is missing, decrease ADJ-X, ADJ-Y.
4) If areas outside the image area is copied, increase ADJ-X, ADJ-Y.

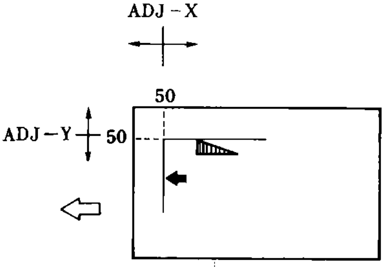
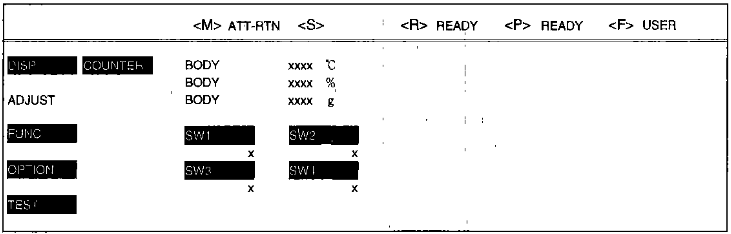


Figure 3-1103

Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

2. Attraction Rotation



```
                    <M> ATT-RTN   <S>       <R> READY   <P> READY   <F> USER

DISP      COUNTER   BODY      xxxx ℃
                    BODY      xxxx %
ADJUST              BODY      xxxx g

FUNC                SW1       SW2
                         x         x
OPTION              SW3       SW4
                         x         x
TEST
```

Item	Description	Remarks
BODY (°C)	Indicates the machine internal temperature measured by the environment sensor.	Identical to the notation under 'DISPLAY→ANALOG'.
BODY (%)	Indicates the machine internal humidity measured by the environment sensor.	
BODY (g)	Indicates the machine internal absolute humidity (g) measured by the environment sensor.	
SW1 SW2 SW3 SW4 (See note)	A single attraction rotation will be added to the normal sequence according to each switch setting regardless of the type of copy paper (plain or otherwise); see the table below. (The sequence will be identical to the sequence used in thick paper/special paper mode.)	

- Details of SW1 through SW4

  A single attraction rotation will be added when each of the switches in the following table is set to '1' and with the mode selected for the checked (✔) cells.

	Copy mode (one-sided/two-sided)		Copy mode (number of colors)	
	1st side of one-sided/two-sided	2nd side of two-sided	Mono	2 or more
SW1	✔			✔
SW2		✔		✔
SW3	✔		✔	✔
SW4		✔	✔	✔

For example,

- If only SW2 is set to '1', an attraction rotation will be added to copying on the second side of a two-sided copy made in full color.
- If both SW3 and SW4 are set to '1', an attraction rotation will be added to all copying modes.

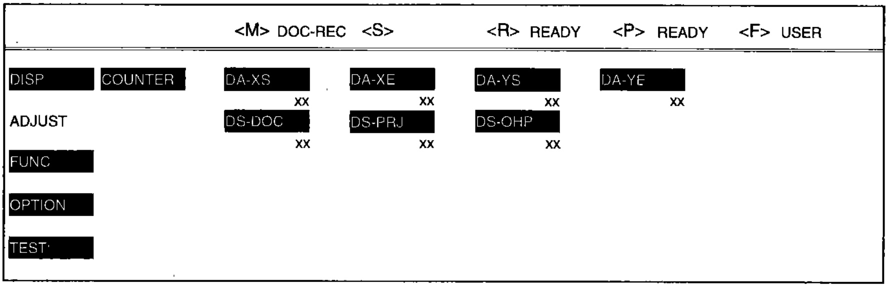
Note:

If you replaced a PCB or cleared a RAM, the values are reset to standard values, necessitating re-input. Make sure you record the items and the values whenever you must change the values on the service label in consideration of this.

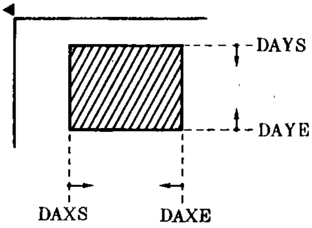
Reference

- This service mode will prove effective when correcting color displacement (magenta displacement/unevenness) caused by faulty attraction.
- Use 'TEST→PG→TYPE=6' (grid) in service mode to check for magenta displacement.
- Use 'TEST→PG→TYPE=5' (halftone), 'DENS-M/C/Y/K=25', or 'TXPH=1' in Service Mode to check for magenta unevenness.

3. Adjusting the Original Detection Area/Slice Level



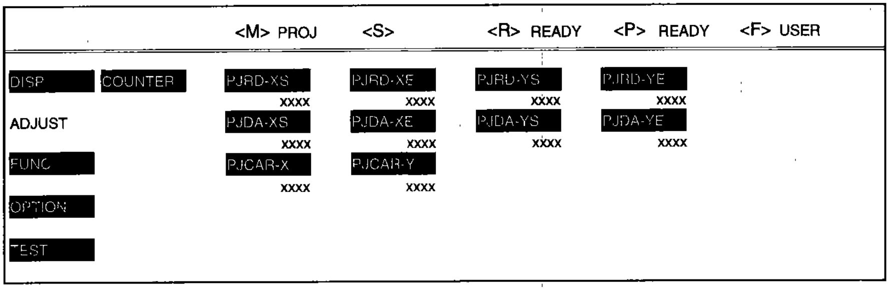
```
                    <M> DOC-REC  <S>        <R> READY   <P> READY   <F> USER

DISP     COUNTER    DA-XS        DA-XE        DA-YS        DA-YE
                          xx           xx           xx           xx
ADJUST              DS-DOC       DS-PRJ       DS-OHP
                          xx           xx           xx
FUNC

OPTION

TEST
```

Item	Description	Remarks
DA-XS DA-XE DA-YS DA-YE (See note)	Adjusting the Original Detection Area An original must remain level on copyboard glass in original detection mode; otherwise, the edges of the original turn out black on the copy. Set the amount of frame erasure in this mode.  Any changes made in this mode affects the amount of frame erasure in original detection mode when the projector is used.	-99 ~ 99 (0 ~ 6.3mm) reference XS=24 XE=8 YS=32 YE=24 unit: 0.06 mm (approx.)
DS-DOC DS-PRJ DS-OHP (See note)	Adjusting the Slice Level in Original Detection You can set any slice level for original detection. A higher slice level will increase the original detection ability but can lead to wrong detection. Use it to detect the projection area when the projector is used. Use it to detect 6x6 ot 8x10 film placed on the copyboard glass when the projector is used.	0 ~ 31 (density level 0 ~ 248) reference value: DS-DOC=21 PRJ=28 OHP=22

Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

4. Adjusting the Projector Area



<M> PROJ <S> <R> READY <P> READY <F> USER

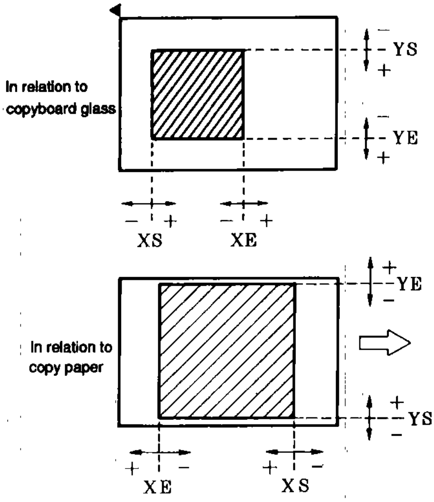
DISP COUNTER PJRD-XS xxxx PJRD-XE xxxx PJRD-YS xxxx PJRD-YE xxxx

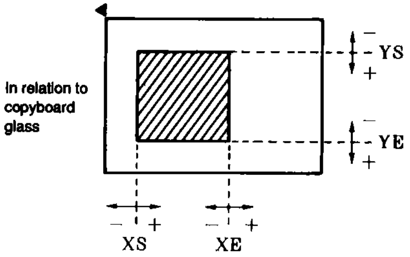
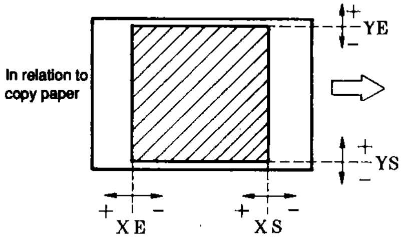
ADJUST PJDA-XS xxxx PJDA-XE xxxx PJDA-YS xxxx PJDA-YE xxxx

FUNC PJCAR-X xxxx PJCAR-Y xxxx

OPTION

TEST

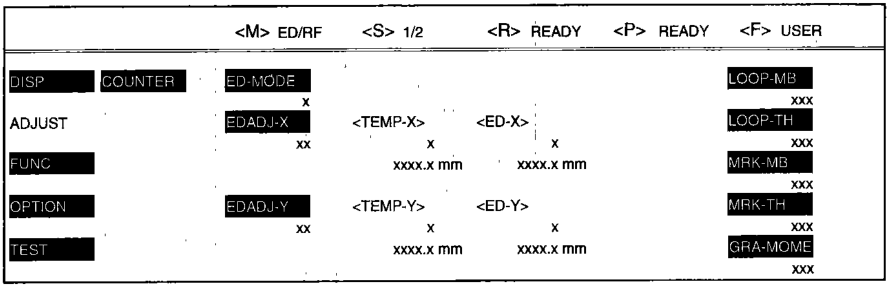
Item	Description	Settings
PJRD-XS PJRD-XE PJRD-YS PJRD-YE	Use it to fine adjust the read area when the original detection mechanism is off while the projector is in use or if original detection fails when the original detection mechanism is on.  In relation to copyboard glass YS YE XS XE In relation to copy paper YE YS XE XS + −	−300 ~ +300 (−19.0 ~ +19.0mm) unit: 0.06 mm (approx.; in reference to copyboard glass) reference value: 0

Item	Description	Settings
PJDA-XS PJDA-XE PJDA-YS PJDA-YE	Use it to fine-adjust the area measured for original detection when the original detection is on with the projector in use. • Use it also on the read area with the original detection mechanism off in copyboard mode. • The area at the time when the reference value (0) is used is 5 mm within the Fresnel lens.  In relation to copyboard glass YS YE XS XE – + 	–99 ~ +99 XS, YE (6.3 ~ +6.3mm) unit: 0.11 mm (approx.) YS, XE (–10.9 ~ +10.9mm) unit: 0.11 mm (approx.)
PJCAR-X PJCAR-Y	Use it to correct the position of projection when original detection is off while the auto changer is in use.	–100 ~ +100 reference: 0

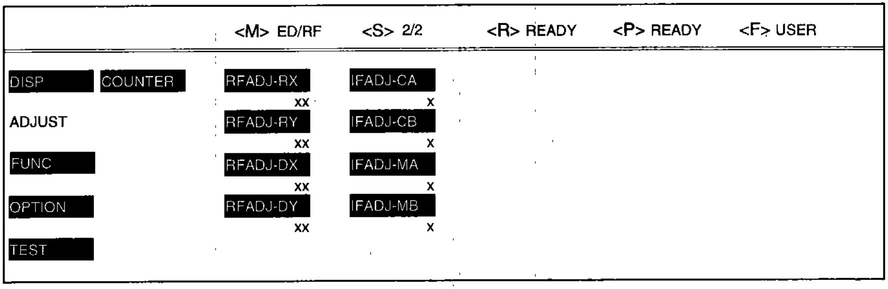
Reference:

PJDA is adjustment of the area to be measured, but NOT adjustment to the area measured. To erase the black frame on copies or to decrease it, adjust 'YE' under 'DA-XS' of 'DOC-REC'.

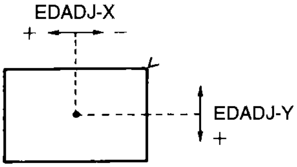
5. Adjusting the Editor



```
                       <M> ED/RF    <S> 1/2      <R> READY   <P> READY   <F> USER

DISP      COUNTER      ED-MODE                                           LOOP-MB
                              x                                              xxx
ADJUST                 EDADJ-X      <TEMP-X>     <ED-X>                  LOOP-TH
                             xx            x            x                    xxx
FUNC                                 xxxx.x mm    xxxx.x mm              MRK-MB
                                                                             xxx
OPTION                 EDADJ-Y      <TEMP-Y>     <ED-Y>                  MRK-TH
                             xx            x            x                    xxx
TEST                                 xxxx.x mm    xxxx.x mm              GRA-MOME
                                                                             xxx
```



```
                       <M> ED/RF    <S> 2/2      <R> READY   <P> READY   <F> USER

DISP      COUNTER      RFADJ-RX     IFADJ-CA
                             xx            x
ADJUST                 RFADJ-RY     IFADJ-CB
                             xx            x
FUNC                   RFADJ-DX     IFADJ-MA
                             xx            x
OPTION                 RFADJ-DY     IFADJ-MB
                             xx            x
TEST
```

Item	Description	Settings
ED-MODE	Switching Editor Operation Mode 0: input prohibit 1: 1-point input 2: continuous input (Use to make checks during adjustment.)	
EDADJ-X	Editor input coordinates in the sub scanning direction (X direction)	-99 ~ +99 -12.6 ~ +12.6 mm unit: 0.13 mm (approx.) standard: 0
<TEMP-X>	Editor sub scanning direction coordinate input value and mm conversion value	
<ED-X>	Editor sub scanning direction adjusted value and mm conversion value	
EDADJ-Y	Editor input coordinates in the main scanning direction (Y direction)	
<TEMP-Y>	Editor main scanning direction coordinate input value and mm conversion value	
<ED-Y>	Editor main scanning direction adjusted value and mm conversion value 	

Item	Description	Settings
LOOP-MB (See note)	Use it to change the processing method used to read images into memory for coloring in area specification/color create Mode. A higher setting lets you fill gaps easily; if the setting is too high, however, the color may spread over the gap.	0 ~ 3 standard: 0
LOOP-TH (See note)	Use it to adjust the slice level adjustment value for binarization used when reading images into memory for coloring in area specification/color create mode. A higher setting lets you read thinner lines.	0 ~ 225 standard: 192
MRK-MB	Use it to change the image data processing method used when reading images into memory for high-light/point specification mode. A higher setting lets you fill gaps easily.	0 ~ 3 standard: 0
MRK-TH	Use it to adjust the slice level for binarization used for reading images into memory in high-light/point specification mode.	0 ~ 225 standard: 128
GRA-MODE	When gradation processing is executed in a copier equipped with an IP-ED PCB, a graduated color is deposited in non-text areas so as to avoid changing the hue of the text. 0: conventional 1: deposit graduated color in entire area (of original; as if in the absence of IP-ED PCB)	0 ~ 1 standard: 0
RFADJ-RX (Notes 1/2)	Use it to adjust the original read start position (X direction) for pick-up from the RDF tray.	0 ~ 99 unit: 0.1 mm standard: 0
RFADJ-RY (Notes 1/2)	Use it to adjust the original read start position (Y direction) for pick-up from the RDF tray.	0 ~ 99 unit: 0.1 mm standard: 23
RFADJ-DX (Notes 1/2)	Use it to adjust the original read start position (X direction) for pick-up from RDF manual feeding.	0 ~ 99 unit: 0.1 mm standard: 0
RFADJ-DY (Notes 1/2)	Use it to adjust the original read start position (Y direction) for pick-up ROM RDF manual feeding	0 ~ 99 unit: 0.1 mm standard: 23
IFADJ-CA/CB/ MA/MB	For R&D (not used)	

Note 1:

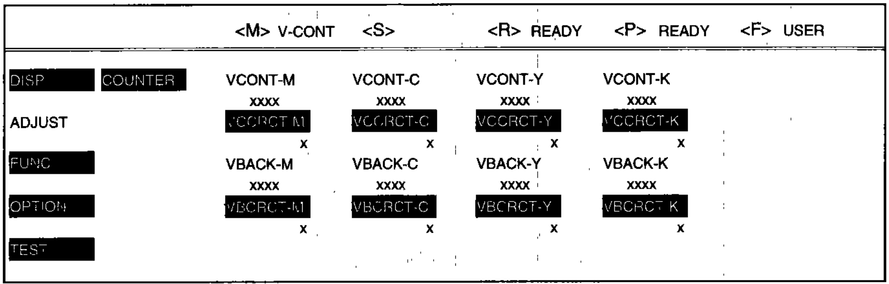
The value of the item returns to its standard value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

Note 2:

Execute the item when installing an RDF or when adjusting the original stop position or horizontal registration. Further, you must perform the following if the ROM of the reader controller is version 13.04 or earlier:

a. Set '23' (initial value) to '-DY' under 'RFADJ-RY' before starting installation.
b. Set 'center shift' to 'ON' when adjusting the horizontal registration.

6. Adjusting the Photosensitive Drum Surface Potential Contrast



<M> V-CONT <S> <R> READY <P> READY <F> USER

DISP	COUNTER	VCONT-M xxxx	VCONT-C xxxx	VCONT-Y xxxx	VCONT-K xxxx
ADJUST		VCCRCT-M x	VCCRCT-C x	VCCRCT-Y x	VCCRCT-K x
FUNC		VBACK-M xxxx	VBACK-C xxxx	VBACK-Y xxxx	VBACK-K xxxx
OPTION		VBCRCT-M x	VBCRCT-C x	VBCRCT-Y x	VBCRCT-K x
TEST					

Item	Description	Remarks
VCONT-M VCONT-C VCONT-Y VCONT-K	Indicates the current value of the target potential contrast	
VCCRCT-M VCCRCT-C VCCRCT-Y VCCRCT-K (See note)	Fine-Adjusting the Contrast Potential Target Value • Effective only in auto contrast mode (VCONT=0 under ADJ-MISC).	–8 ~ +8 reference: 0 +: darker –: lighter
VBACK-M VBACK-C VBACK-Y VBACK-K	Indicates current value of de-fogging potential	
VBCRCT-M VBCRCT-C VBCRCT-Y VBCRCT-K (See note)	Adjusting the defogging potential (Vback)	–8 ~ +8 reference: 0 +: darker –: lighter

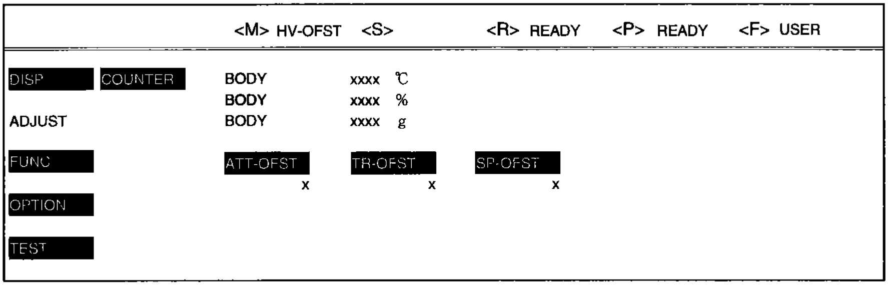
Reference

Vcont + Vcrct + Vtmpr = (VD – VL) – Vback

Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

7. Adjusting the High-Voltage Output of Attraction/Transfer/Separation



```
                          <M> HV-OFST  <S>          <R> READY    <P> READY    <F> USER

DISP       COUNTER        BODY          xxxx ℃
                          BODY          xxxx %
ADJUST                    BODY          xxxx g

FUNC                      ATT-OFST      TR-OFST      SP-OFST
                                 x             x            x
OPTION

TEST
```

Item	Description	Remarks
BODY (°C)	Indicates the machine internal temperature measured by the environment sensor.	Identical to the notation under 'DISPLAY→ANALOG'.
BODY (%)	Indicates the machine internal humidity measured by the environment sensor.	
BODY (g)	Indicates the machine internal absolute humidity (g) measured by the environment sensor.	
ATT-OFST (See note)	Adjusting the high-voltage output for attraction.	Setting :–2 to +2 Unit :2.5 μA Standard: 0
TR-OFST (See note)	Adjusting the high-voltage output for transfer.	Setting :–5 to +5 Unit :0.5 μA Standard: 0
SP-OFST (See note)	Adjusting the high-voltage output for separation (DC component).	Setting :–4 to +2 Unit :60 μA Standard: 0

Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

Reference

- 'ATT-OFST' corresponds to 'HV-ATT' of ROM version 2 or earlier.
- 'TR-OFST' corresponds to 'HV-TR' of ROM version 2 or earlier.

8. Correcting the Color Balance Adjustment for the User

<M> COL-ADJ <S> <R> READY <P> READY <F> USER

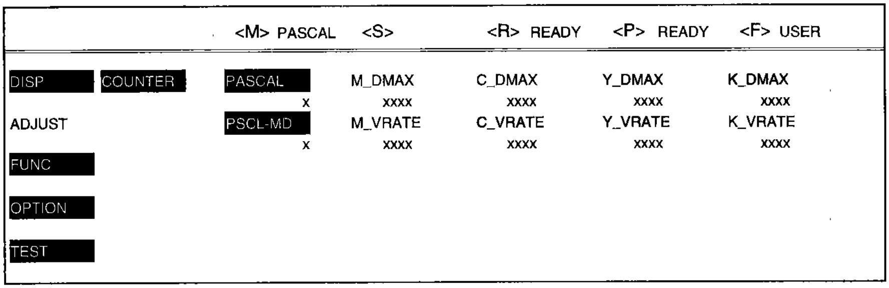
DISP	COUNTER	ADJ-M x	ADJ-C x	ADJ-Y x	ADJ-K x
ADJUST		OFST-M xx	OFST-C xx	OFST-Y xx	OFST-K xx
FUNC		P-ADJ-M x	P-ADJ-C x	P-ADJ-Y x	P-ADJ-K x
OPTION		P-OFST-M xx	P-OFST-C xx	P-OFST-Y xx	P-OFST-K xx
TEST		P-TBL-M xx	P-TBL-C xx	P-TBL-Y xx	P-TBL-K xx

Item	Description	Settings
ADJ-M C Y K (See note)	Correcting the Color Balance Adjustment for the User • You must return the color balance for the user to '0' before making adjustments in this mode. • Make adjustments as indicated in the Image Adjustment Basic Procedure. Note: The reference value is automatically set in relation to 'OPTION' -> 'R-OPT' -> 'NEW-COL'.	–8 ~ +8 reference: if NEW-COL=1, M=0, C=0, Y=0, K=0 if NEW-COL=0, M=–1, C=0, Y=–3, K=0 +: darker –: lighter
OFST-M C Y K (See note)	Adjusting the Density of the Light Area and Color Balance • If fogging is noted, decrease the setting. • To enhance reproduction of images of extremely low density, increase the setting. • To increase the reproducibility of areas where the	–16 ~ +16 reference: M=2 C=0 Y=0 K=0
P-ADJ-M C Y K (Notes 1/2)	Correcting the color Balance Adjustment for Output from the Controller • Be sure to return color balance adjustment for the user to '0' before using this mode. • Make adjustments according to the Image Adjustment Basic Procedure.	–8 ~ +8 reference: if NEW-COL=1, M=1, C=0, Y=–3, K=0 if NEW-COL=0, M=0, C=0, Y=0, K=0 +: darker –: lighter
P-OFST-M Y K (Notes 1/2)	Adjusting Color Balance and Light Areas for Output from C the Controller • Make adjustments according to the Image Adjustment Basic Procedure. • If fogging is noted, increase the value. • To increase the density (if appreciably light), decrease the value.	–16 ~ +16 Standard: 0 reference: M=2 C=0 Y=0 K=0
P-TBL-M C Y K	Fine-Adjusting the Hue to simulate Offset Printing Compare the M, C, Y, and K each against printed material; If the print-out is lighter, increase 'P-TBL-M/C/Y/K' If the print-out is darker, decrease 'P-TBL-M/C/Y/K'.	–3 ~ +3 Standard: 0 See the descriptions for 'OPTION' -> 'R-OPT' -> 'MANAGE'.

Note 1:
The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

Note 2:
Here, the conditions of use vary according to the setting of 'EM-TYPE' of 'REMOTE' under 'OPTION'.

9. PASCAL (auto gradation correction control)



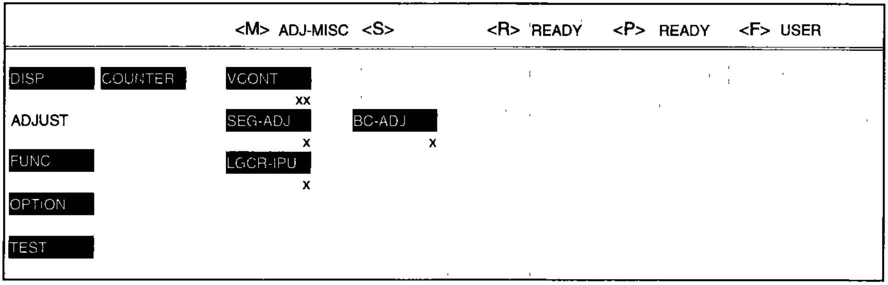
```
                        <M> PASCAL   <S>          <R> READY    <P> READY    <F> USER

DISP      COUNTER       PASCAL      M_DMAX       C_DMAX       Y_DMAX       K_DMAX
                             x        xxxx         xxxx         xxxx         xxxx
ADJUST                  PSCL-MD     M_VRATE      C_VRATE      Y_VRATE      K_VRATE
                             x        xxxx         xxxx         xxxx         xxxx
FUNC

OPTION

TEST
```

Item	Description	Remarks
PASCAL	Specifies whether to use the data for the contrast potential and gradation correction obtained by automatic gradation correction control. 0 : Use. 1 : Do not use.	Normally, '1'; but '0' only when adjusting the image.
M-DMAX C-DMAX Y-DMAX K-DMAX	Indicates the result of comparing the solid density measured when automatic gradation correction control is executed against the design value in terms of %.	Optimum: 75 or higher.
RSCL-MD	Use it to smooth out the gradation area when the output is from the controller. 0 : Conventional 1 : Do not use 2 : Smoothes out gradation areas (however, copying will slow down by about 0.5 sec) Note: If '2' is set, you need to execute auto gradation correction in user mode.	Standard: 0
M-VRATE C-VRATE Y-VRATE K-VRATE	Indicates the control value used to determine the contrast potential (based on M/C/Y/K-DMAX).	0 ~ +2 Reference: 2

Reference

- If the value of 'M/C/Y/K-DMAX' is lower than 75, development with a value lower than 75 may be assumed to have a fault.
- If all value of 'M/C/Y/K-DMAX' are lower than 75, transfer/fixing may be assumed to have a fault.
- If the value of 'M/C/Y/K-DMAX' is 120 or higher and the copy has fogging, 'ATR' for the corresponding color may be suspected to have an error.

10. ADJ-MISC

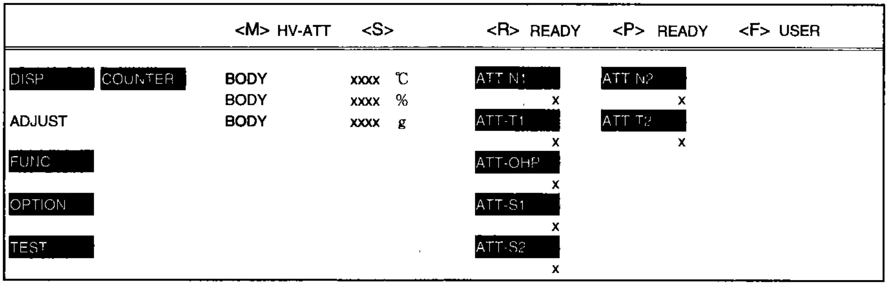


<table>
<tr><th>Item</th><th>Description</th><th>Remarks</th></tr>
<tr><td>VCONT</td><td>Switching between Auto and Manual for the Target Contrast Potential (VG, VDC)
0: auto (set by auto gradation correction control)
1–8: manual
<table>
<tr><th></th><th>M</th><th>C</th><th>Y</th><th>K</th></tr>
<tr><td>1</td><td>320V</td><td>315V</td><td>315V</td><td>330V</td></tr>
<tr><td>2</td><td>317V</td><td>312V</td><td>312V</td><td>328V</td></tr>
<tr><td>3</td><td>310V</td><td>305V</td><td>305V</td><td>321V</td></tr>
<tr><td>4</td><td>295V</td><td>290V</td><td>290V</td><td>308V</td></tr>
<tr><td>5</td><td>275V</td><td>270V</td><td>270V</td><td>290V</td></tr>
<tr><td>6</td><td>270V</td><td>270V</td><td>270V</td><td>270V</td></tr>
<tr><td>7</td><td>270V</td><td>270V</td><td>270V</td><td>270V</td></tr>
<tr><td>8</td><td>270V</td><td>270V</td><td>270V</td><td>270V</td></tr>
<tr><td>9</td><td>reserved</td><td>reserved</td><td>reserved</td><td>reserved</td></tr>
<tr><td>10</td><td>reserved</td><td>reserved</td><td>reserved</td><td>reserved</td></tr>
<tr><td>11</td><td>reserved</td><td>reserved</td><td>reserved</td><td>reserved</td></tr>
<tr><td>12</td><td>reserved</td><td>reserved</td><td>reserved</td><td>reserved</td></tr>
</table></td><td>0 ~ 12
Use 1 through 8 for checks only; return it to '0' after each check.
'9' through '12' are for factory only.</td></tr>
<tr><td>SEG-ADJ
(See note)</td><td>Fine-Adjusting the Text/Photo Separation Level in Text/ Photo Mode or Text/Print Paper Mode
+: tends to identify as photo
–: tends to identify as text
This mode is used to correct 'Text/Photo Adjustment' of user mode.</td><td>–3 ~ +3
reference: 0</td></tr>
<tr><td>BC-ADJ
(See note)</td><td>Black Text Correction
A higher setting causes black text to be darker in 4-color text/photo mode.</td><td>–3 ~ +3
reference: 0</td></tr>
<tr><td>LGCR-IPU</td><td>Set it to '1' if you want the gray balance of images from an external controller to be given priority.</td><td>reference: 0</td></tr>
</table>

Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

11. Fine-Adjusting the High-Voltage Output of Attraction by Condition



```
                    <M> HV-ATT   <S>          <R> READY   <P> READY   <F> USER

DISP     COUNTER    BODY         xxxx ℃       ATT-N1      ATT-N2
                    BODY         xxxx %            x           x
ADJUST              BODY         xxxx g       ATT-T1      ATT-T2
                                                   x           x
FUNC                                          ATT-OHP
                                                   x
OPTION                                        ATT-S1
                                                   x
TEST                                          ATT-S2
                                                   x
```

Item	Description	Remarks
BODY (°C)	Indicates the machine internal temperature measured by the environment sensor.	Identical to the notation under 'DISPLAY→ANALOG'.
BODY (%)	Indicates the machine internal humidity measured by the environment sensor.	
BODY (g)	Indicates the machine internal absolute humidity (g) measured by the environment sensor.	
ATT-N1 (See note)	Effective only when all the following conditions are true: Plain paper mode, one-sided copying or 1st side of two-sided copying, 'ATT-RTN' and SW1 or SW3 set to '1'.	Setting :–2 to +2 Unit :7.5 µA Standard: 0
ATT-N2 (See note)	Effective only when all the following conditions are true: 2nd side of two-sided copying, 'ATT-RTN' and SW2 or SW4 set to '1'.	
ATT-T1 (See note)	Effective only when all the following conditions are true: Thick paper mode, one-sided copying or 1st side of two-sided copying.	
ATT-T2 (See note)	Effective only when all the following conditions are true: Thick paper mode, 2nd side of two-sided copying.	
ATT-OHP (See note)	Effective in OHP mode.	
ATT-S1 (See note)	Effective in special paper 1 mode.	
ATT-S2 (See note)	Effective in special paper 2 mode.	

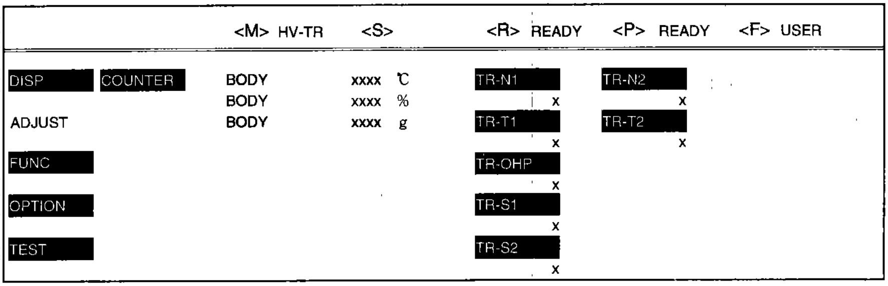
Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

Reference

- This service mode is effective when attraction failure occurs or a transfer fault occurs in each mode.

12. Fine-Adjusting the High-Voltage Output of Transfer by Condition



```
                     <M> HV-TR   <S>        <R> READY   <P> READY   <F> USER

DISP      COUNTER    BODY        xxxx ℃     TR-N1       TR-N2
                     BODY        xxxx %          x           x
ADJUST               BODY        xxxx g     TR-T1       TR-T2
                                                 x           x
FUNC                                        TR-OHP
                                                 x
OPTION                                      TR-S1
                                                 x
TEST                                        TR-S2
                                                 x
```

Item	Description	Remarks
BODY (°C)	Indicates the machine internal temperature measured by the environment sensor.	Identical to the notation under 'DISPLAY→ANALOG'.
BODY (%)	Indicates the machine internal humidity measured by the environment sensor.	
BODY (g)	Indicates the machine internal absolute humidity (g) measured by the environment sensor.	
TR-N1 (See note)	Effective only when all the following conditions are true: Plain paper mode, one-sided copying or 1st side of two-sided copying, 'ATT-RTN' and SW1 or SW3 set to '1'.	Setting : –4 to +4 Unit : 1.0 µA Standard: 0
TR-N2 (See note)	Effective for the 2nd side of two-sided copying.	
TR-T1 (See note)	Effective only when all the following conditions are true: Thick paper mode, one-sided copying or 1st side of two-sided copying.	
TR-T2 (See note)	Effective only when all the following conditions are true: Thick paper mode, 2nd side of two-sided copying.	
TR-OHP (See note)	Effective in OHP mode.	
TR-S1 (See note)	Effective in special paper 1 mode.	
TR-S2 (See note)	Effective in special paper 2 mode.	

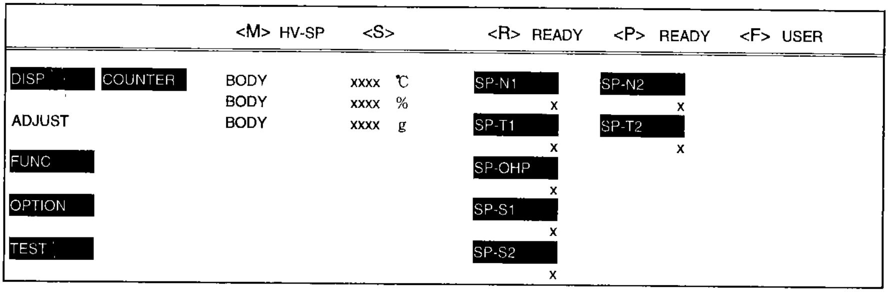
Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

Reference

- This service mode is effective when transfer failure occurs or a transfer fault occurs in each mode.

13. Fine-Adjusting the High-Voltage Output of Separation by Condition



```
                     <M> HV-SP    <S>        <R> READY    <P> READY    <F> USER

DISP      COUNTER    BODY         xxxx ℃     SP-N1        SP-N2
                     BODY         xxxx %          x            x
ADJUST               BODY         xxxx g     SP-T1        SP-T2
                                                  x            x
FUNC                                         SP-OHP
                                                  x
OPTION                                       SP-S1
                                                  x
TEST                                         SP-S2
                                                  x
```

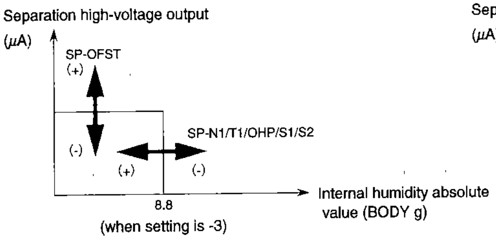
Item	Description	Remarks
BODY (°C)	Indicates the machine internal temperature measured by the environment sensor.	Identical to the notation under 'DISPLAY→ANALOG'.
BODY (%)	Indicates the machine internal humidity measured by the environment sensor.	
BODY (g)	Indicates the machine internal absolute humidity (g) measured by the environment sensor.	
SP-N1 (See note)	Effective only when all the following conditions are true: Plain paper mode, one-sided copying or 1st side of two-sided copying.	Setting: –5 to +5 Unit: 1.0 g/m^3 Standard: –3 (0: SP-N2 only) Changes the timing at which the separation high-voltage output turns off; see Reference b.
SP-N2 (See note)	Effective for the 2nd side of two-sided copying.	
SP-T1 (See note)	Effective only when all the following conditions are true: Thick paper mode, one-sided copying or 1st side of two-sided copying.	
SP-T2 (See note)	Effective only when all the following conditions are true: Thick paper mode, 2nd side of two-sided copying.	
SP-OHP (See note)	Effective in OHP mode.	
SP-S1 (See note)	Effective in special paper 1 mode.	
SP-S2 (See note)	Effective in special paper 2 mode.	

Note:

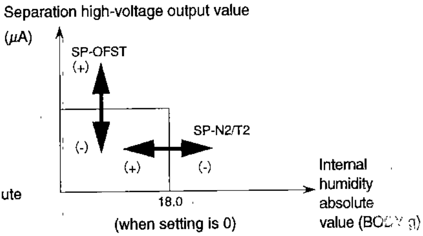
The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

Reference

- This service mode is effective when transfer failure occurs or a transfer fault occurs in each mode. For details on how to use the mode, see the descriptions on troubleshooting image faults.
- The machine's high voltage for separation remains off in a high-humidity environment; the standard setting is the machine internal absolute humidity, i.e., 'BODY g=8.8g'.
  The output of the separation high voltage is turned on or off with reference to the data read by the environment sensor, i.e., machine internal absolute humidity, i.e., 'BODYg'. 'HV-SP' is used to change the slice level for turning the output on or off; further, the output may be adjusted by 'ADJUST→HV-OFST→SP-OFST'.


Separation high-voltage output
(μA)
SP-OFST
(+)
(-)
SP-N1/T1/OHP/S1/S2
(+)
(-)
8.8
Internal humidity absolute value (BODY g)

(when setting is -3)


Separation high-voltage output value
(μA)
SP-OFST
(+)
(-)
SP-N2/T2
(+)
(-)
18.0
Internal humidity absolute value (BODY g)

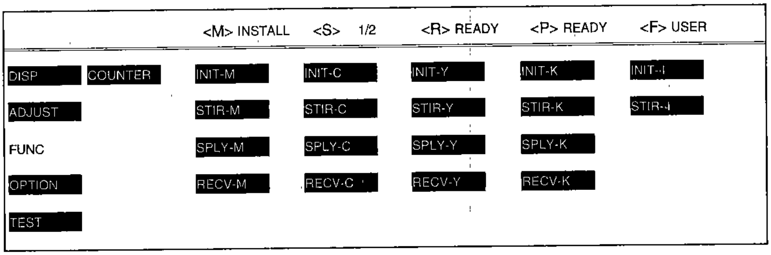
(when setting is 0)

D. Function Mode (FUNCTION)

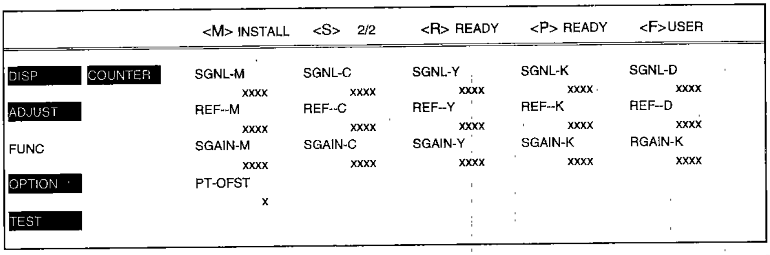
		<M>	<S>	<R> READY	<P> READY	<F> USER
DISP	COUNTER	INSTALL	R-CON	DC-CON	CCD	PRJ-ADJ
ADJUST		LASER		ATTRACT	EPC	
FUNC		BRUSH	FUSER	CST-AD	F-MISCs	F-MISCp
OPTION			TCLN			
TEST						

1	INSTALL	Use it at time of installation.
2	R-CON	Use it for functions related to the reader controller PCB.
3	DC-CON	Use it for functions related to the DC controller PCB.
4	CCD	Use it for functions related to the CCD.
5	PRJ-ADJ	Use it for functions related to the projector.
6	LASER	Use it to functions related to the laser.
7	ATTRACT	Use it for functions related to the point of retention.
8	EPC	Use it for functions related to the measurement of the photosensitive drum potential.
9	BRUSH	Use it for functions related to the transfer/retention brush.
10	FUSER	Use it for functions related to the fixing assembly.
11	CST-AD	Use it for functions related to the cassette paper width.
12	F-MISCs	Use it for functions/inspections related to the reader unit.
13	F-MISCp	Use it for functions/inspections related to the printer unit.
14	TCLN	Use it to operate the polishing roller/oil removing roller.

1. Installation



```
                          <M> INSTALL   <S>   1/2      <R> READY     <P> READY     <F> USER

DISP      COUNTER         INIT-M         INIT-C        INIT-Y        INIT-K        INIT-4
ADJUST                    STIR-M         STIR-C        STIR-Y        STIR-K        STIR-4
FUNC                      SPLY-M         SPLY-C        SPLY-Y        SPLY-K
OPTION                    RECV-M         RECV-C        RECV-Y        RECV-K
TEST
```



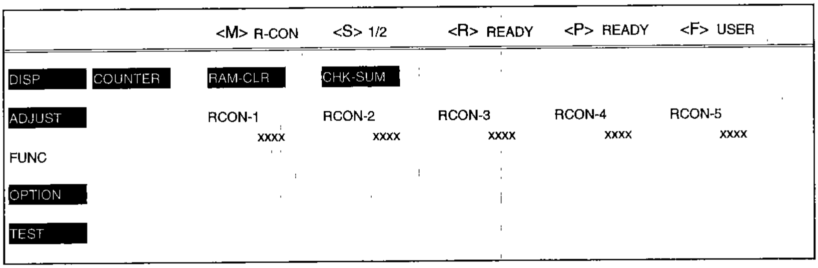
```
                          <M> INSTALL   <S>   2/2      <R> READY     <P> READY     <F>USER

DISP      COUNTER         SGNL-M         SGNL-C        SGNL-Y        SGNL-K        SGNL-D
                                xxxx           xxxx          xxxx          xxxx          xxxx
ADJUST                    REF--M         REF--C        REF--Y        REF--K        REF--D
                                xxxx           xxxx          xxxx          xxxx          xxxx
FUNC                      SGAIN-M        SGAIN-C       SGAIN-Y       SGAIN-K       RGAIN-K
                                xxxx           xxxx          xxxx          xxxx          xxxx
OPTION                    PT-OFST
                                x
TEST
```

Item	Description	Remarks
INIT-M INIT-C INIT-Y INIT-K	Use it to specify the color for which the initial setting of the toner density signal (SGNL, REF) should be read. • The setting will be indicated on the next screen; be sure to record it on the service label.	
INIT-4	Use it to read the initial settings of the toner density signal (SGNL, REF) of the four colors in sequence. • The setting will be indicated on the next screen; be sure to record it on the service label.	Make sure that the copier is in wait state (<P> in service mode is 'READY') before executing 'INIT-4'
STIR-M STIR-C STIR-Y STIR-K	Use it to specify which developer (color) to be stirred.	
STIR-4	Use it to stir the developers (4 colors) in sequence.	
SPLY-M SPLY-C SPLY-Y SPLY-K	Use it to rotate the cylinder of the developer so that the developing assembly will be supplied with the developer of the color.	
PT-OFST	Indicates the correction value of the laser output for BK ATR control. Is set automatically when 'INIT-K' or 'INIT-4' is executed.	Recorded the value on the Service Label after executing 'INIT-K' or 'INIT-4'.

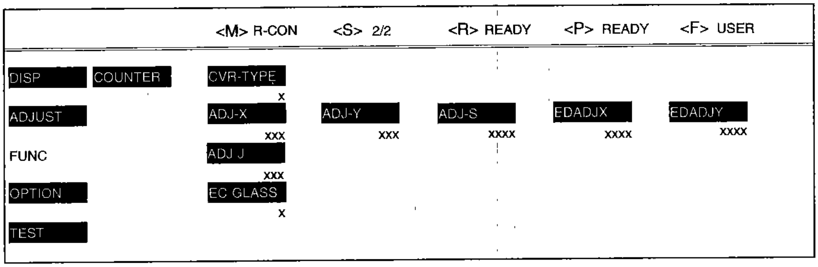
Item	Description	Remarks
RECV-M RECV-C RECV-Y RECV-K	Use it to rotate the cylinder of the developing assembly so that the developer of the specified color will be drawn out of the developing assembly. • Place a plastic bag or the like under the developer before removing the cap from the developer supply mouth found at the bottom of the developing assembly. **Caution:** This is NOT a mode to be executed at the time of installation.	
SGNL-M SGNL-C SGNL-Y SGNL-K	Indicates the value of the toner density signal effective when 'INIT' has been executed as ATR control. Be sure to record in the label on the DC controller PCB; see Figure 3-1102.	SGNL-M/SGNL-C/ SGNL-Y: normally, 818 ±41.
SGNL-D	Indicates the signal value of the black toner density sensor in relation to the reflected light of the photosensitive drum. Be sure to record in the label on the DC controller PCB; see Figure 3-1102.	Normally, 614 ±21.
REF-M REF-C REF-Y REF-K	Indicates the value of the toner density reference signal when 'INIT' has been executed as ATR control. Be sure to record in the label on the DC controller PCB; see Figure 3-1102.	REF-K: Normally, 818 ±41.
REF-D	Indicates the reference signal value of the black toner density sensor in relation to the reflected light of the photosensitive drum.	
SGAIN-M SGAIN-C SGAIN-Y SGAIN-K	Indicates the value of the gain for the toner density signal at time of ATR control (gain used for setting SGNL-M/SGNL-C/SGNL-Y to '818' and SGNL-D to '614'). Be sure to record in the label on the DC controller PCB; see Figure 3-1102.	
RGAIN-K	Indicates the value of the gain for toner density reference signal at time of ATR control (gain used for setting REF-K to '818'). Be sure to record in the label on the DC controller PCB; see Figure 3-1102.	

Caution:
You must make sure that the machine has completed its wait-up period ('P' on the service mode display is 'READY') before executing any mode.

2. Functions Related to the Reader Controller PCB



```
                        <M> R-CON    <S> 1/2     <R> READY    <P> READY    <F> USER

DISP       COUNTER      RAM-CLR      CHK-SUM

ADJUST                  RCON-1       RCON-2      RCON-3       RCON-4       RCON-5
                             xxxx         xxxx         xxxx         xxxx         xxxx
FUNC

OPTION

TEST
```



```
                        <M> R-CON    <S> 2/2     <R> READY    <P> READY    <F> USER

DISP       COUNTER      CVR-TYPE
                               x
ADJUST                  ADJ-X        ADJ-Y       ADJ-S        EDADJX       EDADJY
                              xxx          xxx         xxxx         xxxx         xxxx
FUNC                    ADJ J
                              xxx
OPTION                  EC GLASS
                               x
TEST
```

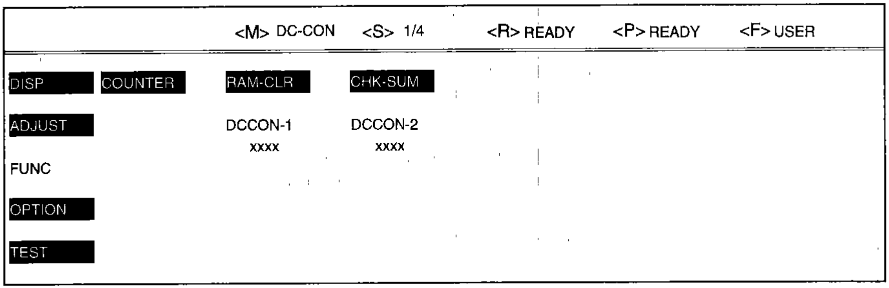
Entering Back up Data

You must enter the data recorded on the label (Figure 3-1102) using the screen whenever you have replaced the reader controller PCB.

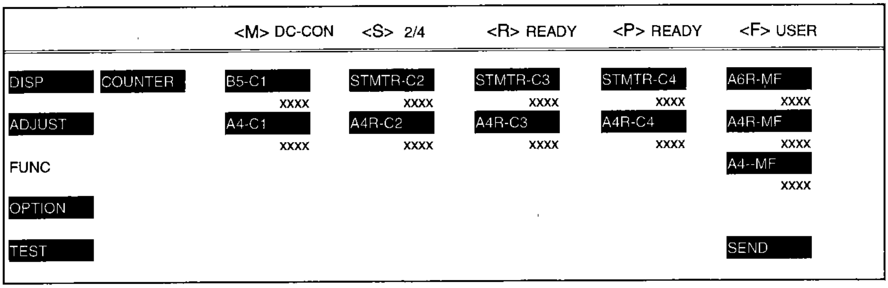
Item	Description	Remarks
RAM-CLR	Use it to clear the RAM on the reader controller PCB and to set the standard settings.	
CHK-SUM	Use it to start checking the ROM on the reader controller PCB. (by totaling the RAM data).	
RCON-1	Indicates the check sum value of Q605 on the reader controller PCB.	
RCON-2	Indicates the check sum value of Q616 on the reader controller PCB.	
RCON-3	Indicates the check sum value of Q617 on the reader controller PCB.	
RCON-4	Indicates the check sum value of Q901 on the reader controller PCB.	
RCON-5	Not used.	
CVR-TYPE	Use it to enter the version of CVR. 0: old type 1: new type	
ADJ-X	Use it to enter the adjustment value of the image read start position in the sub scanning direction.	
ADJ-Y	Use it to enter the adjustment value of the image read start position in the main scanning direction.	

Item	Description	Remarks
ADJ-S	Use it to enter the adjustment value of the point of shading.	
EDADJX	Use it to enter the adjustment value of the specified position in the sub scanning direction of the editor.	
EDADJY	Use it to enter the adjustment value of the specified position in the main scanning direction of the editor.	
ADJ-J	Enter the auxiliary rotation time for the scanner motor.	
EC-GLASS	Set it to '1' if EC-coated glass is used.	The initial setting at time of executing 'RAM-CLR' is '1' for the 115/230V model.

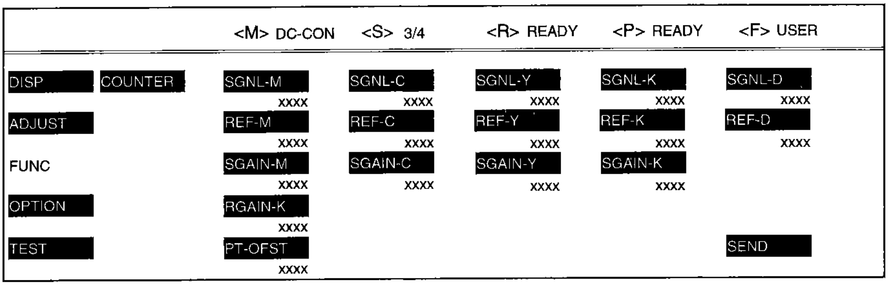
3. Functions Related to the DC Controller PCB



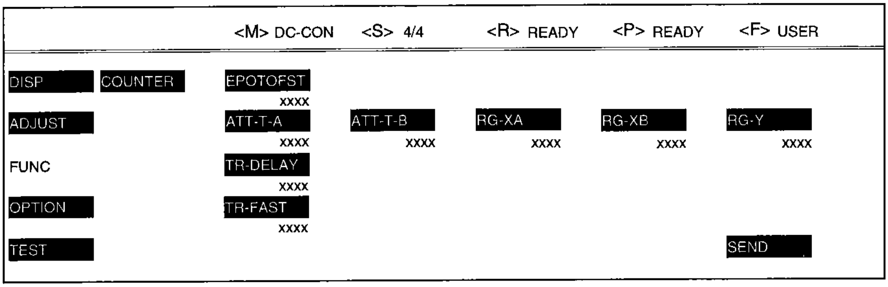
```
                        <M> DC-CON    <S> 1/4      <R> READY    <P> READY    <F> USER

DISP      COUNTER       RAM-CLR       CHK-SUM

ADJUST                  DCCON-1       DCCON-2
                          XXXX          XXXX
FUNC

OPTION

TEST
```



```
                        <M> DC-CON    <S> 2/4      <R> READY    <P> READY    <F> USER

DISP      COUNTER       B5-C1         STMTR-C2     STMTR-C3     STMTR-C4     A6R-MF
                             XXXX          XXXX         XXXX         XXXX         XXXX
ADJUST                  A4-C1         A4R-C2       A4R-C3       A4R-C4       A4R-MF
                             XXXX          XXXX         XXXX         XXXX         XXXX
FUNC                                                                         A4--MF
                                                                                  XXXX
OPTION

TEST                                                                         SEND
```



```
                        <M> DC-CON    <S> 3/4      <R> READY    <P> READY    <F> USER

DISP      COUNTER       SGNL-M        SGNL-C       SGNL-Y       SGNL-K       SGNL-D
                             XXXX          XXXX         XXXX         XXXX         XXXX
ADJUST                  REF-M         REF-C        REF-Y        REF-K        REF-D
                             XXXX          XXXX         XXXX         XXXX         XXXX
FUNC                    SGAIN-M       SGAIN-C      SGAIN-Y      SGAIN-K
                             XXXX          XXXX         XXXX         XXXX
OPTION                  RGAIN-K
                             XXXX
TEST                    PT-OFST                                              SEND
                             XXXX
```



```
                        <M> DC-CON    <S> 4/4      <R> READY    <P> READY    <F> USER

DISP      COUNTER       EPOTOFST
                             XXXX
ADJUST                  ATT-T-A       ATT-T-B      RG-XA        RG-XB        RG-Y
                             XXXX          XXXX         XXXX         XXXX         XXXX
FUNC                    TR-DELAY
                             XXXX
OPTION                  TR-FAST
                             XXXX
TEST                                                                         SEND
```

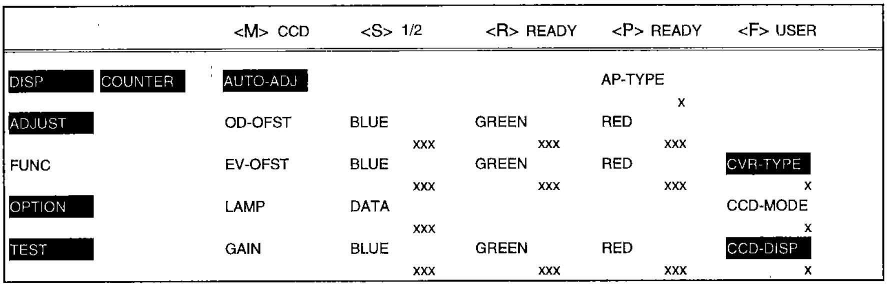
Entering Backup Data

You must enter the data recorded on the label shown in Figure 3-1102 using this screen whenever you have replaced the DC controller PCB.

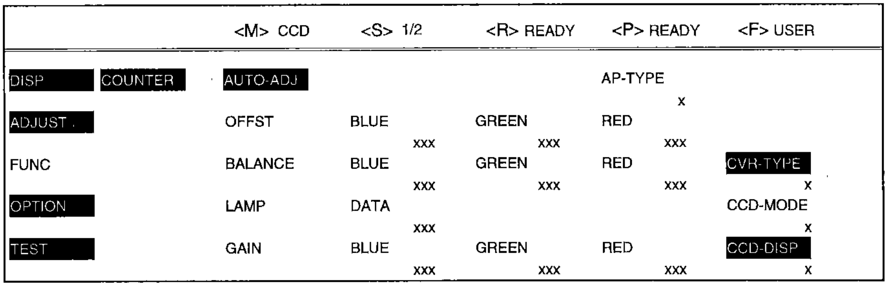
Item	Description	Remarks
RAM-CLR	Use it to clear RAM on the DC controller PCB and to set the standard settings.	
CHK-SUM	Use it to start checking the ROM on the DC controller PCB (by totaling the RAM data).	
DCCON-1	Indicates the check sum value of IC104 on the DC controller PCB.	
DCCON-2	Not used.	
B5-C1	Use it to enter the adjustment value of the paper width detection reference point 1 for the cassette 1.	
A4-C1	Use it to enter the adjustment value of the paper width detection reference point 2 for the cassette 1.	
STMTR-C2	Use it to enter the adjustment value of the paper width detection reference point 1 for the cassette 2.	If CLC800, no indication.
A4R-C2	Use it to enter the adjustment value of the paper width detection reference point 2 for the cassette 2.	
STMTR-C3	Use it to enter the adjustment value of the paper width detection reference point for the cassette 3.	If CLC700, no indication.
A4R-C3	Use it to enter the adjustment value of the paper width detection reference point 2 for the cassette 3.	
STMTR-C4	Use it to enter the adjustment value of the paper width detection reference point 1 for the cassette 4.	If CLC700, no indication.
A4R-C4	Use it to enter the adjustment value of the paper width detection reference point 2 for the cassette 4.	
A6R-MF	Use it to enter the adjustment value of the paper width reference point 1 for the multifeeder.	
A4R-MF	Use it to enter the adjustment value of the paper width detection reference point 2 for the multifeeder.	
A4-MF	Use it to enter the adjustment value of the paper width detection reference value 3 fort the multifeeder.	
SEND	Use it to transfer the image data of the screen on display to the reader controller.	
SGNL-M SGNL-C SGNL-Y SGNL-K	Use it to enter the toner density signal.	
SGNL-D	Use it to enter the value of the toner density signal at time of correction for the window soiling.	

Item	Description	Remarks
REF-M REF-C REF-Y REF-K	Use it to enter the value of the toner density reference signal.	
REF-D	Use it to enter the value of the toner density reference signal at time of correction for the window soiling.	
SGAIN-M SGAIN-C SGAIN-Y SGAIN-K	Use it to enter the gain for the toner density signal at time of toner density control.	
RGAIN-K	Use it to enter the value of the gain for the toner density reference signal at time of toner density control.	
PT-OFST	Enter the correction value for the laser output for BK ATR.	
SEND	Use it to transfer the data of the screen on display to the DC controller PCB. When service mode is ended, the copy that follows will reflect the transferred data.	
EPOTOFST	Use it to enter the potential offset value.	
ATT-T-A	Use it to enter the adjustment value of the side A retention timing for the transfer drum.	
ATT-T-B	Use it to enter the adjustment value of the side B retention timing for the transfer drum.	
RG-XA	Use it to enter the registration adjustment value of the side A sub scanning direction (paper feeding direction) for the transfer drum.	
RG-XB	Use it to enter the registration adjustment value of the side B sub scanning direction (paper feeding direction) for the transfer drum.	
RG-Y	Use it to enter the registration adjustment value of the main scanning direction (drum axial direction) for the transfer drum.	
TR-DELAY	Use it to enter the adjustment value of the point of transfer.	
TR-FAST	Enter the value used when changing the trailing edge margin.	-127~127 Unit: 0.1mm See "Changing the Image Trailing Edge Margin."
SEND	Use it to transfer the data of the screen on display to the reader controller PCB. When service mode is ended, the copy that follows will reflect the transferred data.	

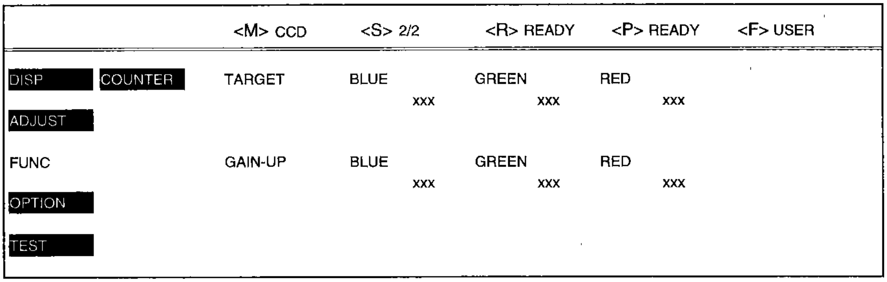
4. Making CCD-Related Adjustments



		<M> CCD	<S> 1/2	<R> READY	<P> READY	<F> USER
DISP	COUNTER	AUTO-ADJ			AP-TYPE x	
ADJUST		OD-OFST	BLUE xxx	GREEN xxx	RED xxx	
FUNC		EV-OFST	BLUE xxx	GREEN xxx	RED xxx	CVR-TYPE x
OPTION		LAMP	DATA xxx			CCD-MODE x
TEST		GAIN	BLUE xxx	GREEN xxx	RED xxx	CCD-DISP x



		<M> CCD	<S> 1/2	<R> READY	<P> READY	<F> USER
DISP	COUNTER	AUTO-ADJ			AP-TYPE x	
ADJUST		OFFST	BLUE xxx	GREEN xxx	RED xxx	
FUNC		BALANCE	BLUE xxx	GREEN xxx	RED xxx	CVR-TYPE x
OPTION		LAMP	DATA xxx			CCD-MODE x
TEST		GAIN	BLUE xxx	GREEN xxx	RED xxx	CCD-DISP x



		<M> CCD	<S> 2/2	<R> READY	<P> READY	<F> USER
DISP	COUNTER	TARGET	BLUE xxx	GREEN xxx	RED xxx	
ADJUST						
FUNC		GAIN-UP	BLUE xxx	GREEN xxx	RED xxx	
OPTION						
TEST						

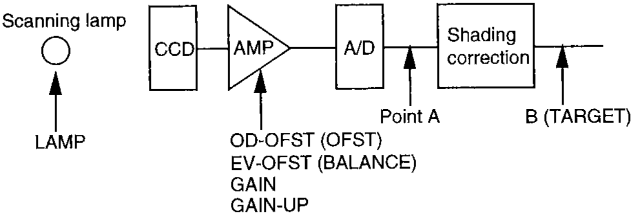
Item	Description	Remarks
AUTO-ADJ	Use it to start automatic adjustment. The bar code data on the standard white plate is read and offset-adjustment, scanning lamp intensity adjustment, and gain adjustment are executed in sequence.	Adjustments are made so that the value of point A is the setting obtained from the bar code data.
AP-TYPE	Use it to indicate the version of the analog processor PCB. 0: old type 1: new type	

Item		Description	Remarks
OD-OFST		Use it to indicate the value of the offset level for the odd bits of the CCD.	Be sure to copy the values on the service label attached to the cover of the DC controller PCB.
	BLUE	Use it to indicate the data of BLUE for the offset level.	
	GREEN	Use it to indicate the data for GREEN for the offset level.	
	RED	Use it to indicate the data for RED for the offset level.	
EV-OFST (AP-TYPE=0)		Use it to indicate the value of the offset level for the even bits of the CCD.	
	BLUE	Use it to indicate the data for BLUE for the offset level.	
	GREEN	Use it to indicate the data for GREEN for the offset level.	
	RED	Use it to indicate the data for RED for the offset level.	
LAMP		Use it to indicate the level adjustment value for the scanning lamp.	
DATA		Use it to indicate the level data for the scanning lamp.	
OFFSET (AP-TYPE=1)		Use it to indicate the offset level adjustment value for the odd bits of the CCD.	
	BLUE	Use it to indicate the data for BLUE for the offset level.	
	GREEN	Use it to indicate the data for GREEN for the offset level.	
	RED	Use it to indicate the data for RED for the offset level.	
BALANCE (AP-TYPE=1)		Use it to indicate the balance level adjustment value for the even bits and the odd bits of the CCD.	
	BLUE	Use it to indicate the data for BLUE for the balance level.	
	GREEN	Use it to indicate the data for GREEN for the balance level.	
	RED	Use it to indicate the data for RED for the balance level.	

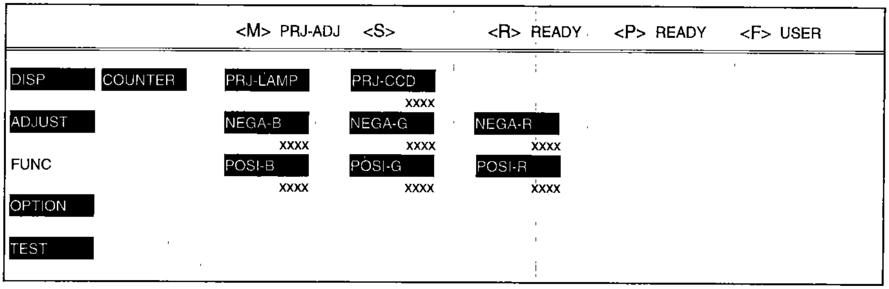
Item		Description	Remarks
GAIN		Use it to indicate the gain level adjustment value for the CCD.	
	BLUE	Use it to indicate the data for BLUE for the gain level.	
	GREEN	Use it to indicate the data for the GREEN for the gain level.	
	RED	Use it to indicate the data for the RED for the gain level.	
TARGET		Use it to indicate the shading adjustment correction value (target value for pint B).	Be sure to record the values on the service level attached to the cover of the DC controller PCB.
	BLUE	Use it to indicate the data for BLUE.	
	GREEN	Use it to indicate the data for GREEN.	
	RED	Use it to indicate the data for RED.	
CVR-TYPE (See note)		Use it to enter the version of the CVR. 0: old type 1: new type	
CCD-MODE		Use it to check the result of 'AUTO-ADJ', i.e., normal or precious metal mode.	0: normal 1: precious metal
CCD-DISP		Use it to switch the data display of the CCD screen.	0: normal 1: precious metal
GAIN-UP		Use it to check which mode is effective, i.e., gain-up or normal. gain up: 255 normal: 0	In gain-up mode, the gain will be double that of normal mode.
	BLUE	Use it to indicate the data for BLUE.	
	GREEN	Use it to indicate the data for GREEN.	
	RED	Use it to indicate the data for RED.	

Note 1:

The value of the item returns to its standard value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.



5. Adjusting the Projector



<M> PRJ-ADJ <S> <R> READY <P> READY <F> USER

DISP COUNTER PRJ-LAMP PRJ-CCD xxxx

ADJUST NEGA-B xxxx NEGA-G xxxx NEGA-R xxxx

FUNC POSI-B xxxx POSI-G xxxx POSI-R xxxx

OPTION

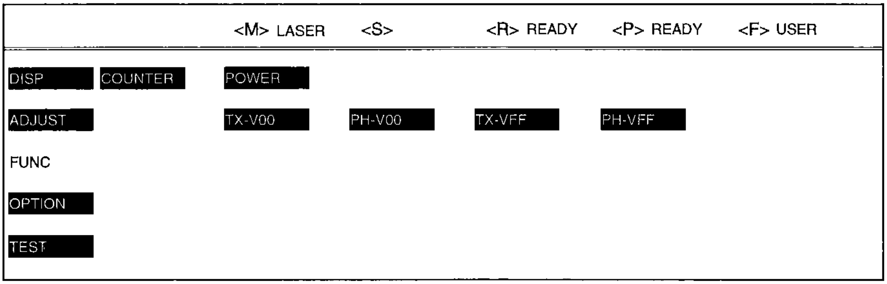
TEST

Item	Description	Settings
PRJ-LAMP	Use it to keep the lamp of the film projector on for 1 min. (Press 'PRJ-LAMP' to turn it off.)	
PRJ-CCD	Use it to adjust the gain of the CCD at time of installation and to read data.	
NEGA-B NEGA-G NEGA-R (See note)	Use it to adjust the target value for shading correction when copying negative film using the film projector. • A higher setting increases the density B → Y G → M R → C	−100 ~ +100
POSI-B POSI-G POSI-R	Use it to adjust the target value for shading correction used when making positive film with the film projector in use. • A lower setting for the following darkens the images: B → Y G → M R → C	−100 ~ +100

Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

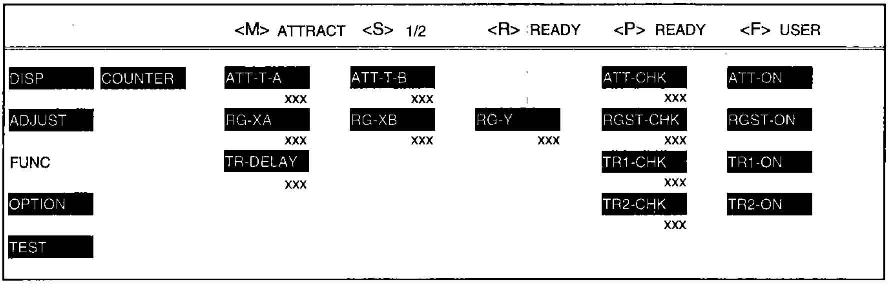
6. Adjusting the Laser

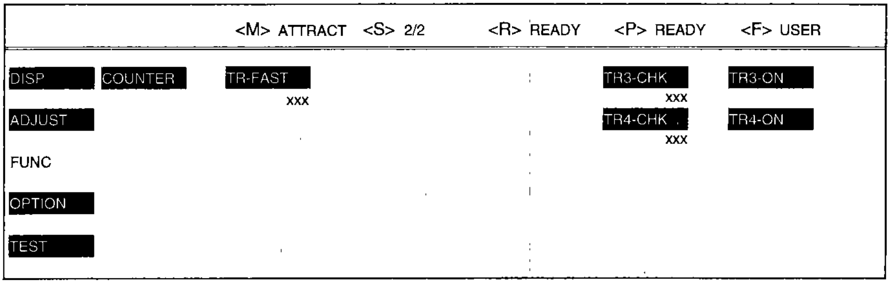


```
                         <M> LASER   <S>         <R> READY   <P> READY   <F> USER

DISP        COUNTER      POWER

ADJUST                   TX-V00      PH-V00      TX-VFF      PH-VFF

FUNC

OPTION

TEST
```

Item	Description	Remarks
POWER	Use it to turn on the laser output for adjusting the laser power.	Press 'STOP' to turn it off.
TX-V00	Use it to turn on the laser output for V00 to check V00 for text mode.	
PH-V00	Use it to turn on the laser output for V00 to check V00 for photo mode.	
TX-VFF	Use it to check the laser output for V00 to check VFF for text mode.	
PH-VFF	Use it to turn on the laser output to for V00 to check VFF in photo mode.	

7. Adjusting the Point of Retention

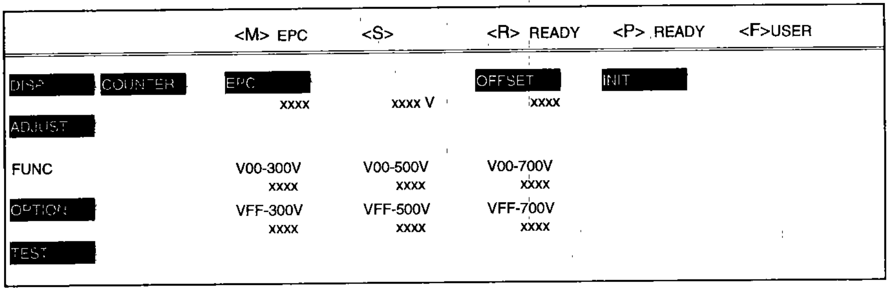

<M> ATTRACT <S> 1/2 <R> READY <P> READY <F> USER
DISP
COUNTER
ADJUST
FUNC
OPTION
TEST
ATT-T-A
xxx
ATT-T-B
xxx
ATT-CHK
xxx
ATT-ON
RG-XA
xxx
RG-XB
xxx
RG-Y
xxx
RGST-CHK
xxx
RGST-ON
TR-DELAY
xxx
TR1-CHK
xxx
TR1-ON
TR2-CHK
xxx
TR2-ON


<M> ATTRACT <S> 2/2 <R> READY <P> READY <F> USER
DISP
COUNTER
ADJUST
FUNC
OPTION
TEST
TR-FAST
xxx
TR3-CHK
xxx
TR3-ON
TR4-CHK
xxx
TR4-ON

Item	Description	Remarks
ATT-T-A	Use it to enter the timing of retention of copy paper to side A of the transfer drum.	Unit: 0.1 mm
ATT-T-B	Use it to enter the timing of retention of copy paper to side B of the transfer drum.	Unit: 0.1 mm
ATT-CHK	Use it to specify the point of retention on the transfer drum. 1: Double-side retention (side B, side A) 2: Side A retention 3: Side B retention	
ATT-ON	Use it to execute retention of copy paper to the transfer drum. Attracts copy paper to the transfer drum. The paper is picked up from cassette 1; therefore, 'NO PAPER' will appear under <P> on the display if cassette 1 is out of paper; the notation returns to 'READY' when paper has been supplied.	
RG-XA	Use it to enter the fine-adjustment value of the point of retention in X direction (paper feeding direction) on side A of the transfer drum.	Unit: 0.1 mm
RG-XB	Use it to enter the fine-adjustment value of the point of retention in X direction (paper feeding direction) on side B of the transfer drum.	Unit: 0.1 mm

Item	Description	Remarks
RG-Y	Use it to enter the fine-adjustment value of the point of retention in the Y direction (drum axial direction) of the transfer drum.	
RGST-CHK	Use it to specify the mode for 'RGST-ON' operation. 1: Double-sided retention (side B, side A) 2: Side A retention 3: Side B retention	
RGST-ON	Use it to generate a cyan mono print. The side (A or B) will be indicated on the print face.	
TR-DELAY	Use it to enter the fine-adjustment value of the point of transfer.	
TR1-CHK	Use it to specify the mode for 'TR1-ON' operation. 1: Double-side retention (side B, side A) 2: Side A retention 3: Side B retention	
TR1-ON	Use it to adjust to a leading margin of 1 mm; see Figure 2-16 in Service Handbook for an output sample.	
TR2-CHK	Use it to specify the mode for 'TR2-ON' operation. 1: Double-side retention 2: Side A retention 3: Side B retention	
TR2-ON	Use it to check the leading edge margin (8 mm); see Figure 2-16 in Service Handbook for an output print.	
TR-FAST	Use it to set the appropriate transfer high-voltage trailing edge control value to accommodate a trailing edge margin of 2.5 mm.	See “Changing the Image Trailing Edge Margin.”
TR3-CHK	Use it to select the appropriate mode for ‘TR3-ON’. 1: 2-sheet retention (side B, side A) 2: side A retention 3: side B retention	
TR3-ON	Use it to generate a test print for checking the TR-FAST adjustment value.	
TR4-CHK	Use it to select the appropriate mode for ‘TR4-ON’. 1: 2-sheet retention (side B, side A) 2: side A retention 3: side B retention	
TR4-ON	Use it to generate a test print for checking the trailing edge of 2.5 mm.	

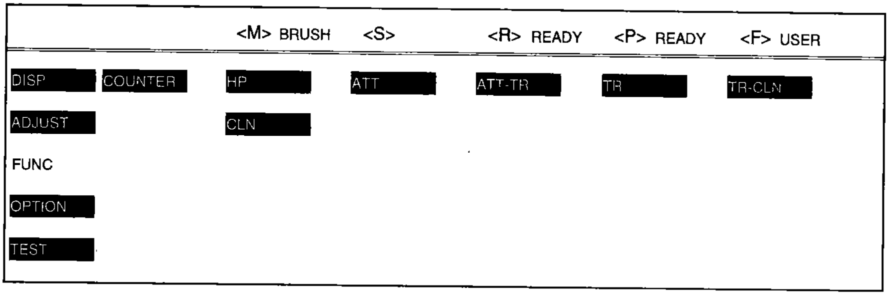
8. Measuring the Photosensitive Drum Potential



```
                        <M> EPC       <S>          <R> READY    <P> READY    <F>USER

DISP      COUNTER       EPC                        OFFSET       INIT
                            xxxx        xxxx V        xxxx
ADJUST

FUNC                    V00-300V      V00-500V     V00-700V
                            xxxx        xxxx          xxxx
OPTION                  VFF-300V      VFF-500V     VFF-700V
                            xxxx        xxxx          xxxx
TEST
```

Item	Description	Remarks
EPC	Use it to measure the photosensitive drum potential.	The potential measurement data will be used for the next copying operation.
OFFSET	Use it to execute offset adjustment for the potential measuring PCB of the photosensitive drum.	The potential measurement data will be used for the next copying operation.
INIT	Use it to initialize the potential measurement data for the photosensitive drum.	Be sure to set 'PAS-CAL' under 'ADJUST to '0' when executing this mode.
V00-300V	Indicates the photosensitive drum surface potential when the grid bias potential of the primary corona assembly is 300 V and the laser output is V00.	guide: 280 ~ 380
V00-500V	Indicates the photosensitive drum surface potential when the grid bias potential of the primary corona assembly is 500 V and the laser output is V00.	guide: 480 ~ 620
V00-700V	Indicates the photosensitive drum surface potential when the grid bias potential of the primary corona assembly is 700 V and the laser output is V00.	guide: 680 ~ 860
VFF-300V	Indicates the photosensitive drum surface potential when the grid bias potential of the primary corona assembly is 300 V and the laser output is VFF.	guide: 35 ~ 145
VFF-500V	Indicates the photosensitive drum surface potential when the grid bias potential of the primary corona assembly is 500 V and the laser output is VFF.	guide: 40 ~ 190
VFF-700V	Indicates the photosensitive drum surface potential when the grid bias potential of the primary corona assembly is 700 V and the laser output is VFF.	guide: 45 ~ 235

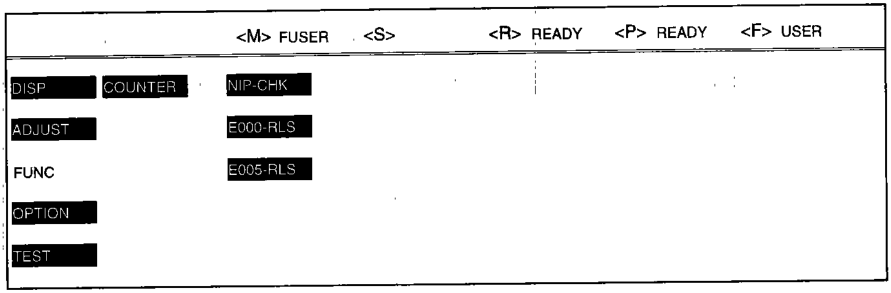
9. Transfer/Retention Brush Functions



```
                        <M> BRUSH   <S>         <R> READY   <P> READY   <F> USER
DISP      COUNTER       HP          ATT         ATT-TR      TR          TR-CLN
ADJUST                  CLN
FUNC
OPTION
TEST
```

Item	Description	Remarks
HP	Use it to rotate the brush drive motor, thereby causing a move to the home position.	
ATT	Use it to rotate the brush drive motor, thereby causing a move to the point of retention (retention brush engagement position).	
ATT-TR	Use it to rotate the brush drive motor, thereby causing a move to the point of retention/transfer (retention brush and transfer brush).	
TR	Use it to rotate the brush drive motor, thereby causing a move to the point of transfer (transfer brush engagement position).	
TR-CLN	Use it to rotate the brush drive motor, thereby causing a move to the point of transfer/transfer cleaning, i.e., transfer brush and cleaning push-on brush engagement position.	
CLN	Use it to rotate the brush drive motor, thereby causing a move to the point of transfer cleaning (cleaning push-on brush engagement position).	

10. Functions Related to the Fixing Assembly

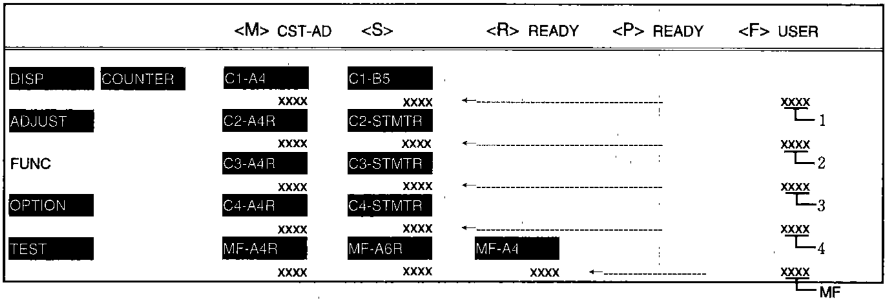


<M> FUSER <S> <R> READY <P> READY <F> USER

DISP COUNTER NIP-CHK
ADJUST E000-RLS
FUNC E005-RLS
OPTION
TEST

Item	Description	Remarks
NIP-CHK	Measuring the Fixing Nip Stops copy paper at a specific point and discharges it. The paper is picked up from cassette 1; therefore, 'NO PAPER' will appear under <P> on the display if cassette 1 is out of paper; the notation returns to 'READY' when paper has been supplied.	Press 'NIP-CHK' to execute. <P> changes from 'READY' to 'SERVICE and then to 'READY'.
E000-RLS	Clearing E000 Be sure to turn the power switch off and then on after execution.	The indication for <P> changes from 'ERROR' to 'SERVICE' and then to 'ERROR'. Turn off and then on the power switch to clear.
E005-RLS	Clearing E005 Be sure to turn off and on the power switch after execution.	

11. Adjusting the Cassette Paper Width

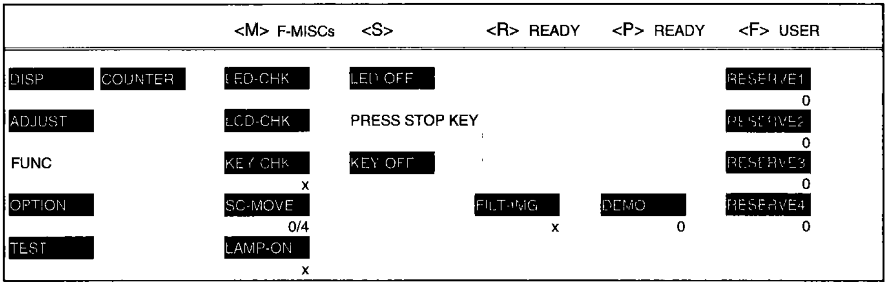


See the descriptions in "5. Storing the Cassette/Multifeeder Basic Settings" under "B. Electrical" of "II. Standards and Adjustments."

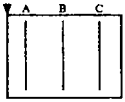
Item	Description	Remarks
C1-A4	Use it to execute automatic adjustment of the paper width reference 2 of the cassette 1.	
C1-B5	Use it to execute automatic adjustment of the paper width reference 1 of the cassette 1.	
C2-A4R	Use it to execute automatic adjustment of the paper width reference 2 of the cassette 2.	If CLC800, no indication.
C2-STMTR	Use it to execute automatic adjustment of the paper width reference 1 of the cassette 2.	
C3-A4R	Use it to execute automatic adjustment of the paper width reference 2 of the cassette 3.	If CLC700, no indication.
C3-STMTR	Use it to execute automatic adjustment of the paper width reference 1 of the cassette 3.	
C4-A4R	Use it to execute automatic adjustment of the paper width reference 2 of the cassette 4.	If CLC700, no indication.
C4-STMTR	Use it to execute automatic adjustment of the paper width reference 1 of the cassette 4.	
MF-A4R	Use it to execute automatic adjustment of the paper width reference 2 of the multifeeder.	
MF-A6R	Use it to execute automatic adjustment of the paper width reference 1 of the multifeeder.	
MF-A4	Use it to execute automatic adjustment of the paper width reference 3 of the multifeeder.	

Item	Description	Remarks
xxxx 1	Indicates the AD conversion value of the paper width detection reference point of the cassette 1.	
xxxx 2	Indicates the AD conversion value of the paper width detection reference point of the cassette 2.	If CLC800, no indication.
xxxx 3	Indicates the AD conversion value of the paper width detection reference point of the cassette 3.	If CLC700, no indication
xxxx 4	Indicates the AD conversion value of the paper width detection reference point of the cassette 4.	
xxxx ....MF	Indicates the AD conversion value of the paper width detection reference of the multifeeder.	

12. Functions/Inspections Related to the Reader Unit



```
                    <M> F-MISCs  <S>             <R> READY  <P> READY  <F> USER

DISP    COUNTER     LED-CHK      LED OFF                               RESERVE1
                                                                              0
ADJUST              LCD-CHK      PRESS STOP KEY                        RESERVE2
                                                                              0
FUNC                KEY CHK      KEY OFF                               RESERVE3
                           x                                                  0
OPTION              SC-MOVE                     FILT-IMG   DEMO        RESERVE4
                         0/4                           x          0           0
TEST                LAMP-ON
                           x
```

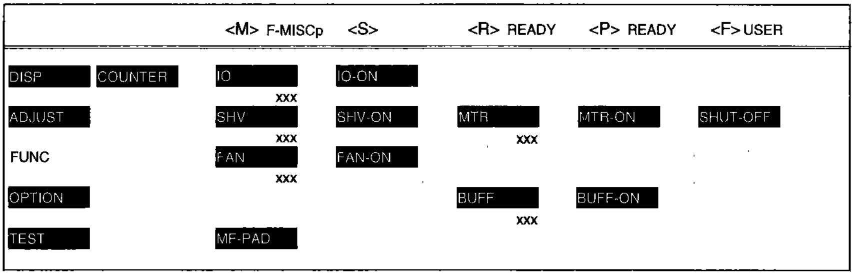
<table>
<tr><th>Item</th><th>Description</th><th>Remarks</th></tr>
<tr><td>LED-CHK</td><td>Use it to start checking LED activation.</td><td></td></tr>
<tr><td>LED-OFF</td><td>Use it to end checking LED activation.</td><td></td></tr>
<tr><td>LCD-CHK</td><td>Use it to start LCD activation.
(Highlights the key.)</td><td>To end checking, press the Stop key.</td></tr>
<tr><td>KEY-CHK</td><td>Use it to start checking the KEY input.
(See descriptions on 'KEY-CHK'.)</td><td>Indicates the number/name of the input key.</td></tr>
<tr><td>KEY-OFF</td><td>Use it to end checking the KEY input.</td><td></td></tr>
<tr><td>SC-MOVE</td><td>Starts checking the scanner. Each press on 'SC-MOV' causes the following indications and operations:
<table>
<tr><th>Indication</th><th>Operation</th></tr>
<tr><td>0/4</td><td>HP → A</td></tr>
<tr><td>1/4</td><td>HP → B</td></tr>
<tr><td>2/4</td><td>HP → C</td></tr>
<tr><td>3/4</td><td>HP</td></tr>
</table></td><td>
</td></tr>
<tr><td>FILT-IMG</td><td>Use it to check the output of each CCD (RGB). Place a color original on the copyboard glass, and press the Copy Start key; the output of each CCD (RGB) is printed on separate sheets in cyan mono.
After making copies, the execution ends automatically.</td><td>Each press on the key changes the intensity data to '00' and '80'.</td></tr>
</table>

Item	Description	Remarks
LAMP-ON	Starts checking the scanning lamp. Each press on 'LAMP-ON' causes the following indications and operations: <table><tr><th>Indication</th><th>Operation</th></tr><tr><td>0 → 1 1 → 0</td><td>Turns on at intensity data 80 (light) Turns on at intensity data 00 (dark)</td></tr></table>	Each press on the key changes the intensity data to '00' and '80'.
DEMO	For R&D (not used)	
RESERVE 1~4	For R&D (not used)	

<Details of 'KEY-CHK'.>

Key	Key name
0 through 9	0 ~ 9
Reset	RESET
Stop	STOP
Two-Sided	A
One-Touch Adjust	B
Color Adjust	C
Extended Zoom	D
Frame Erase	E
Color Create	F
Page Separate	G
Image Create	I
Marker	J
Synthesis	L
User Mode	M
OHP Interleaf	O
Start	START
Pre-Heat	STAND BY
Interrupt	INTERRUPT
Cover	N
Area Specify	K
Shift	H
Start	START
Clear	CLEAR
ID	ID
Call	CALL

13. Functions/Inspection Related to the Printer Unit



Item	Description	Remarks
IO	Use it to specify the type of I/O check.	See details.
IO-ON	Use it to start check on the I/O.	During operation, <P> SERVICE.
SHV	Use it to specify the type of check on the high-voltage output.	0 through 6 See the table on next page.
SHV-ON	Use it to start checks on the high-voltage output.	During operation, <P> SERVICE.
MTR	Use it to specify the type of checks on the motor.	00 through 18 See the table on next page.
MRT-ON	Use it to start checks on the motor.	During operation, <P> SERVICE.
SHUT-OFF	Executes an operation check for auto power-off.	During operation, <P> SERVICE.
FAN	Use it to specify the type of check on the fan.	00 through 19 See the table on next page.
FAN-ON	Use it to start checks on the fan.	During operation, <P> SERVICE.
BUFF	Use it to specify a stop position (length of advancement) for the pressure cam inside the buffer path. 1: 0 mm 2: 0.7 mm 3: 1.2 mm Enter a number using the keypad, and press the OK key to register.	
BUFF-ON	Use it to drive the buffer pass motor and the solenoid, thereby moving the cam to the specified position in 'BUFF'. After checking the operation, be sure to set 'BUFF' to '1' and execute 'BUFF-ON'.	After setting 'BUFF' to '1', be sure to turn off and then on the power.
MF-PAD	Executes aging for the manual feed pad of the multifeeder; i.e., rotates the multifeeder roller.	During operation, <P> SERVICE.

Reference

- You must execute 'MF-PAD' whenever you have replaced the manual feed pad of the multifeeder assembly.

- Details of IO

No		No	
40	oil removing roller solenoid (SL11)	75	developing M cylinder clutch (CL1)
42	decurling sheet solenoid (SL28)	76	Bk toner supply clutch (CL8)
43	fixing cleaning belt take-up solenoid (SL6)	77	Y toner supply clutch (CL7)
44	fixing cleaning belt releaisng solenoid (SL5)	78	C toner supply clutch (CL6)
45	delivery paper deflecting plate drive solenoid (SL20)	79	M toner supply clutch (CL5)
46	separation claw drive solenoid (SL8)	116	delivery vertical path roller 2 drive clutch (CL23)
48	duplexing pick-up assembly stopper plate solenoid (upper; SL27)	118	multifeeder pick-up solenoid (SL15)
49	duplexing pick-up assembly stopper plate solenoid (lower; SL27)	129	buffer solenoid 1
50	duplexing drive cluth (CL22)	130	buffer clutch 1
51	duplexing feeding roller solenoid (SL22)	133	pre-exposure lamp (LA2)
52	L paper deflecting plate drive solenoid (SL23)	144	transfer drum cleaner solenoid (SL14)
53	M paper deflecting plate drive solenoid (SL24)	147	registration roller releasing solenoid (SL9)
54	S paper deflecting plate drive solenoid (SL25)	148	registration roller drive clutch (CL9)
55	SS paper deflecting drive solenoid (SL26)	149	retention guide drive solenoid (SL10)
60	pre-registration roller 1 drive clutch (CL10)	150	transfer drum drive solenoid (SL13)
61	pre-registration roller 2 drive clutch (CL11)	155	duplexing pick-up assembly pick-up solenoid (SL21)
62	pick-up vertical path roller 1 clutch (CLC800; CL20)	156	cassette 4 pick-up solenoid (SL19)
63	pick-up vertical path roller 3 clutch (CL18)	157	cassette 3 pick-up solenoid (SL18)
64	pick-up vertical path roller 2 clutch (CL21)	158	cassette 2 pick-up solenoid (SL17)
65	pick-up vertical path roller 1 clutch (CLC700; CL15)	159	cassette 1 pick-up solenoid (SL16)
66	multifeeder pick-up clutch (CL12)	167	separation spacer push-up solenoid (SL7)
67	duplexing pick-up clutch (CL19)		
68	cassette 4 pick-up clutch (CL17)		
69	cassette 3 pick-up clutch (CL16)		
70	cassette 2 pick-up clutch (CL14)		
71	cassette 1 pick-up clutch (CL13)		
72	developing Bk cylinder clutch (CL4)		
73	developing Y cylinder clutch (CL3)		
74	developing C cylinder clutch (CL2)		

SHV in Detail

Type number	High-voltage	Description
0	—	High-voltage output absent.
1	Primary corona assembly, grid output	Photosensitive drum motor: on Pre-exposure: on Photosensitive drum: 1 rotation Primary output/grid output (550V): on (wait for stop, 10 rotations of photosensitive drum) Primary output/grid output (500V): off Photosensitive drum: 1 rotation Pre-exposure: off Photosensitive drum motor: off
2	Primary corona assembly, grid output, retention, transfer, internal static eliminator output, external static eliminator output	Photosensitive drum motor: on Pre-exposure lamp: on Photosensitive drum: 1 rotation Primary corona assembly/grid output (500V): on Transfer drum: engaged Internal/External static eliminator output: on Retention/transfer corona output: on (wait for stop, 10 rotations of photosensitive drum) Retention/corona output: off Internal/external static eliminator output: off Thereafter, power-on sequence is executed. (multiple initial rotation, transfer drum/static eliminator sequence)
3	Primary corona assembly, grid output, M developing assembly output	Photosensitive drum: on Pre-exposure lamp: on Photosensitive drum: 1 rotation Primary corona assembly/grid output (500V): on M developing assembly: AC/DC on (wait for stop, 10 rotations of photosensitive drum) M developing assembly: disengaged (AC/DC off) Primary corona assembly output/grid output (500V): off Photosensitive drum: 1 rotation Pre-exposure: off Photosensitive drum motor: off

Type number	High-voltage	Description
4	Primary corona assembly, grid output, C developing assembly output	Photosensitive drum motor: on Pre-exposure: on Photosensitive drum: 1 rotation Primary corona assembly/grid output (500V): on M developing assembly: engaged (AC/DC on) (wait for stop, 10 rotations of photosensitive drum) M developing assembly: disengaged (AC/DC off) Primary corona assembly/grid bias (500V): off Photosensitive drum: 1 rotation Pre-exposure: off Photosensitive drum motor: off
5	Primary corona assembly, grid output, Y developing assembly output	Photosensitive drum motor: on Pre-exposure: on Photosensitive drum: 1 rotation Primary corona assembly output/grid output (500V): on Y developing assembly: engaged (AC/DC on) (wait for stop, 10 rotations of photosensitive drum) Y developing assembly: disengaged (AC/DC off) Primary corona assembly output/grid output (500V): off Photosensitive drum: 1 rotation Pre-exposure: off Photosensitive drum motor: off
6	Primary corona assembly, grid output, K developing assembly output	Photosensitive drum motor: on Pre-exposure: on Photosensitive drum: 1 rotation Primary output/grid output (500V): on K developing assembly: engaged (AC/DC on) (wait for stop, 10 rotations of photosensitive drum) K developing assembly: disengaged (AC/DC off) Primary corona assembly output, grid output (500V): off Photosensitive drum: 1 rotation Pre-exposure: off Photosensitive drum motor: off

- 'MTR in Detail

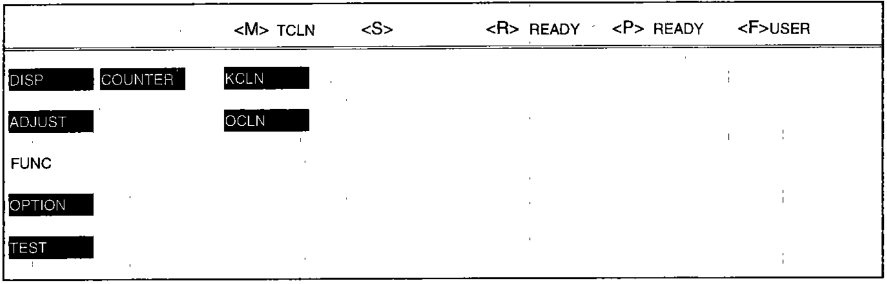
Type number	Motor	Description
00	M6 (pick-up motor)	Operates for 10 sec, stops for 3 sec, and operates again for 10 sec, and then stops.
02	M4 (main motor)	Operates for 120 sec, stops for 3 sec, and operates again for 10 sec, and then stops. (each drive clutch, off)
03	M8 (hopper motor)	Operates for 10 sec, stops for 3 sec, and operates again for 10 sec, and then stops. (each drive clutch, off)
04	M10 (transfer drum cleaner motor)	Operates for 10 sec, stops for 3 sec, and operates again for 10 sec, and then stops. (transfer drum cleaner not in contact with transfer drum)
05	M9 (cleaner assembly reciprocating motor)	Rotates the photosensitive drum motor at speed 1 (for plain paper); operates for 10 sec, stops for 3 sec, and operates again for 10 sec, and then stops. Stops the photosensitive drum motor.
06	M3 (laser scanner motor)	Operates for 10 sec, stops for 3 sec, and rotates continuously.
07	M5 (fixing motor)	Rotates for 10 sec in speed 1 (for plain paper), rotates for 10 sec in speed 2 (for plain paper 2 sides), rotates for 10 sec in speed 3 (for thick paper), rotates for 10 sec in speed 4 (for OHP), and then stops for 3 sec. The above operations are repeated three times.
08	M2 (photosensitive motor)	Rotates for 10 sec in speed 1 (for plain paper), rotates for 10 sec in speed 2 (for plain paper 2 sides), rotates for 10 sec in speed 3 (for thick paper), rotates for 10 sec in speed 4 (for OHP), and then stops for 3 sec. The above operations are repeated three times.
09	M7 (primary corona wire cleaning motor)	Executes 1 round-trip cleaning operation.

Type number	Motor	Description
16	M11 (brush drive motor)	Searches for home position. After the move to the point of retention, stops for 3 sec. After the move to the point of retention/transfer, stops for 3 sec. After the move to the point of transfer, stops for 3 sec. After the move to the point of transfer/push-on brush on position, stops for 3 sec. Searches for home position. The above operations are repeated twice.
17	M17 (duplexing unit reversing assembly switchback motor)	Executes pull-in operation for 3 sec (rotation at low speed). Executes pull-in operation for 3 sec (rotation at high speed). Executes feed-out operation for 3 sec (rotation). Stops for 3 sec. Executes pull-in operation for 3 sec (rotation at high speed). Executes feed-out operation for 3 sec (rotation). Stops
18	M16 (paper jogging guide drive motor)	Searches home position, and then stops for 3 sec. After the move to the A4 position, stops for 3 sec. After the move to the B4 position, stops for 3 sec. After the move to the A4R position, stops for 3 sec. After the move to the B5R position, searches home position.

FAN in Detail

Type number	Fan	Description
00	FM15 (feeding fan 2)	Operates for 5 sec, stops for 5 sec, and operates again for 5 sec, and then stops.
01	FM14 (feeding fan 1)	Operates for 5 sec, stops for 5 sec, and operate for 5 sec, and then stops.
02	FM2 (primary corona assembly fan)	Operates for 5 sec, stops for 5 sec, and operates continuously.
03	FM4 (ozone suction fan 1)	Operates for 5 sec, stops for 5 sec, and then operates continuously.
04	FM13 (ozone suction fan 2)	Operates for 5 sec, stops for 5 sec, and operates continuously.
05	FM12 (developing bias power supply PCB cooling fan)	Operates for 5 sec, stops for 5 sec, and operates again for 5 sec, and then stops.
16	FM10 (electrical unit fan 1)	Operates for 5 sec (100%), and operates again for 5 sec (50%), and then stops; further, operates for 5 sec (100%), and operations again for 5 sec (50%), and then operates continuously.
18	FM9 (IP cooling fan)	Operates for 5 sec (100%), and operates again for 5 sec (50%), and then stops; further, operates for 5 sec (100%), and operations again for 5 sec (50%), and then operates continuously.
19	FM3 (fixing heat exhaust fan)	Operates for 5 sec (100%), and operates again for 5 sec (50%), and then stops; further, operates for 5 sec (100%), and operates again for 5 sec (50%), and then operates continuously.

14. Movement of the Polishing Roller/Oil Removing Roller

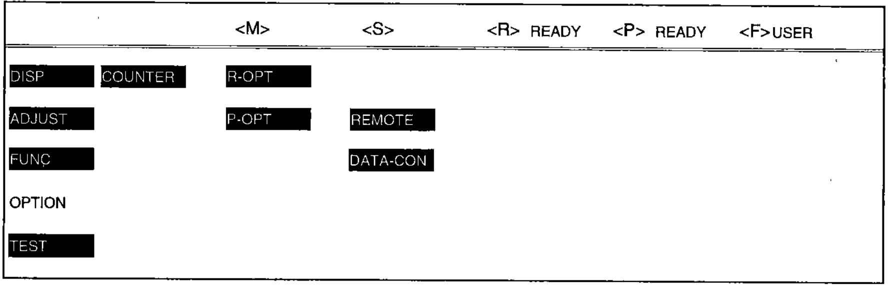


<M> TCLN <S> <R> READY <P> READY <F>USER

Item	Description	Remarks
KCLN	The polishing roller is moved into contact and rotated while the transfer drum is rotating (about 3 min). During operation, '<P> SERVICE'.	The operation ends automatically after a specific period of time.
OCLN	The oil removing roller is moved into contact and rotated while the transfer drum is rotating (about 3 min). During operation, '<P> SERVICE'.	

E. Machine Settings Mode (OPTION)

Setting Mode


<M>
<S>
<R> READY
<P> READY
<F>USER
DISP
COUNTER
R-OPT
ADJUST
P-OPT
REMOTE
FUNC
DATA-CON
OPTION
TEST

1	R-OPT	Use it to select machine settings related to the reader unit.
2	P-OPT	Use it to adjust the transfer drum stop position (cleaning mode).
3	REMOTE	Use it to set the parameters when an external controller is connected.
4	DATA-CON	Use it to note that a connection is made to the Copy Data Controller A1.

1. Machine Settings Mode (reader unit)

<M> R-OPT <S> <R> READY <P> READY <F>USER

DISP	COUNTER	P-SIZE	MANAGE
		xx	xx
ADJUST		OHP-MODE	NEW-COL
		xx	xx
FUNC		METAL	COIN-SET
		xx	xx
OPTION		CONTROL	
		xxxx	
TEST		DF-AUTO	
		x	

Item	Description	Remarks
P-SIZE (See note)	Use it cause the machine to identify the size of copy paper and transparencies.	0: AB 1: inch 2: A 3: all
OHP-MODE (See note)	Use it to select the maximum density of the copy image on transparencies. 0: Dmax=1.3 1: Dmax=1.7	settings: 0 to 3 standard: 0 However only '0' and '1' are enabled at present.
METAL (See note)	Use it to specify whether to use 'precious metal mode' or not in user mode.	0: enable 1: disable
CONTROL	You may permit copying, printing, or scanning operation with conditions by changing the low-order three digits in the absence of a control key, control card, or ID number. For instance, if 'CONTROL' is set to '002', in the absence of a control key you may use the IPU1 protocol to generate black-and-white/color printouts, use the IPU2 protocol to generate black-and-white/color printouts, use the IPU1 protocol to initiate scanning, or use the IPU2 protocol to initiate scanning.	Note: Controllers of IPU1 Protocol IPU10, IPU10S, PS-IPU III (Ver. 1.0), Color Pass 1000 (Ver. 1.0), IPU II(CLC350/550 Board), PS-XJ (Step 1,2), Color Pass 2000/3000/4000 (Step 1,2) Controllers of IPU2 Protocol F/S III, PS-IPU III (Ver. 1.1), Color Pass 1000 (Ver. 1.1), IPU II (CLC700/800 Board), PS-XJ (Step 3), Color Pass 2000/3000/4000 (Step 3)

Releasing with Control Key Condition

1st digit of 'CONTROL'	B/W copy	B/W print-out			Color print-out			Scanning		
		IPU1	PS-IPU	IPU2	IPU1	PS-IPU	IPU2	IPU1	PS-IPU	IPU2
0	×	×	×	×	×	×	×	×	—	×
1	×	×	×	×	×	×	×	○	—	○
2	×	○	×	○	○	×	○	○	—	○
3	○	×	×	○	×	×	×	○	—	○
4	○	○	×	○	○	×	○	○	—	○

Releasing with Control Card Condition

2nd digit of 'CONTROL'	B/W copy	B/W print-out			Color print-out			Scanning		
		IPU1	PS-IPU	IPU2	IPU1	PS-IPU	IPU2	IPU1	PS-IPU	IPU2
0	×	×	×	×	×	×	×	×	—	×
1	×	×	×	×	×	×	×	○	—	○
2	×	○	○	○	○	○	○	○	—	○
3	○	×	×	○	×	×	×	○	—	○
4	○	○	○	○	○	○	○	○	—	○

<table>
<tr><th>Item</th><th>Description</th><th>Remarks</th></tr>
<tr><td>CONTROL</td><td>Releasing with ID No. Condition
<table>
<tr><th>3rd digit of 'CONTROL'</th><th>B/W copy</th><th colspan="3">B/W print-out</th><th colspan="3">Color print-out</th><th colspan="3">Scanning</th></tr>
<tr><th></th><th></th><th>IPU1</th><th>PS-IPU</th><th>IPU2</th><th>IPU1</th><th>PS-IPU</th><th>IPU2</th><th>IPU1</th><th>PS-IPU</th><th>IPU2</th></tr>
<tr><td>0</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>—</td><td>×</td></tr>
<tr><td>1</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>○</td><td>—</td><td>○</td></tr>
<tr><td>2</td><td>×</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>—</td><td>○</td></tr>
<tr><td>3</td><td>○</td><td>×</td><td>×</td><td>○</td><td>×</td><td>×</td><td>×</td><td>○</td><td>—</td><td>○</td></tr>
<tr><td>4</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>—</td><td>○</td></tr>
</table>
○: permit.
×: prohibit.
IPU1: Controller of IPU1 protocol.
IPU2: Controller of IPU2 protocol.
PS-IPU: PS-IPU controller.</td><td></td></tr>
<tr><td>DF-AUTO</td><td>Use it to set auto start for RDF manual feeding.
0: w/ auto start
1: w/o auto start</td><td></td></tr>
<tr><td>MANAGE</td><td>Use it to simulate hues of offset printing.
0: standard
1: offset printing
If 'MANAGE' is set to '1', the offset Printing mode button will be indicated on the user mode screen.
If the value of 'OPTION' 'R-OPT' 'NEW-COL' is '1' and the value of 'MANAGE' is set to '1', set the value of 'ADJUST' 'COL-ADJ' 'P-ADJ' to M=0, C=0, Y=0, K=0.</td><td>Setting: 0,1
Standard: 0
For fine-adjusting hues, see the description of 'ADJUST' → 'COL-ADJ' →'P-TGL-M/C/Y/K' (service mode).</td></tr>
<tr><td>NEW-COL</td><td>Use it to improve reproduction of human skin tone.
0: standard
1: enhance
If the value of 'NEW-COL' is set to '0', set the value of 'REMOTE' 'OPTION' 'EM-TYPE' to '0'.</td><td>Setting: 0, 1
Standard: 1</td></tr>
<tr><td>COIN-SET</td><td>Use it to set coin operation mode (back-up).
0: standard, displays the standard screen (without a control card)
1: displays a screen with the message "Insert a coin."
2: displays a screen with the message "Insert a copying card."
In 1 or 2, no animation is used on the screen.</td><td>Setting: 0, 1, 2
Standard: 0</td></tr>
</table>

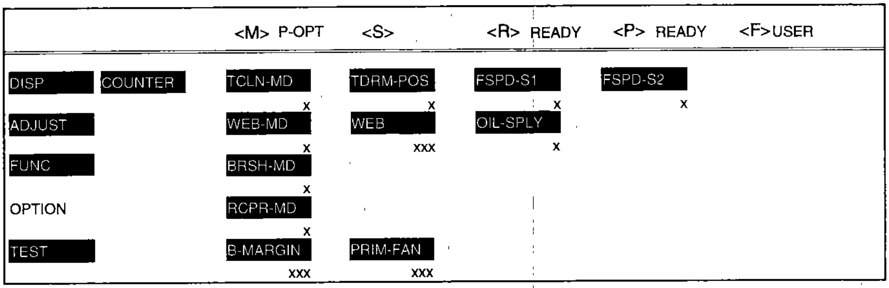
Note:

If you replaced a PCB or cleared a RAM, the values are reset to standard values, necessitating re-input. Make sure you record the items and the values whenever you must change the values on the service label in consideration of this.

Reference

An OHP projector may be a reflecting type or a transmitting type. If the installed projector is a transmitting type, the user can expect better results if the copy image maximum density is lower; select the appropriate setting according to the type of projector.

2. Setting Cleaning Mode/Transfer Drum Stop Position



Item	Description	Remarks
TCLN-MD	Use it to select the appropriate cleaning sequence for the transfer drum. 0: Cleaning for a single rotation of the transfer drum. 1: Cleaning for two rotations of the transfer drum.	Settings : 0,1
TDRM-POS	Use it to change the stop position of the transfer drum.	Settings : 0 ~ 4 Standard : 1
FSPD-S1	Use it to change the fixing speed for special paper 1. 0: normal (plain paper) 1: 2nd side in 2-sided copying (plain paper) 2: thick paper 3: special paper 2	Setting: 0 to 3 Standard: 1 During copying, the fixing web remains in contact.
FSPD-S2 (See note 2)	Use it to change the fixing speed for special paper 2. 0: normal (plain paper) 1: 2nd side in 2-sided copying (plain paper) 2: thick paper 3: special paper 2	Setting: 0 to 3 Standard: 3 During, copying, the fixing web remains off contact.
WEB-MD	Use it to change the on/off sequence of the cleaning belt solenoid. (At present, only '1' is available.)	Standard : 1
WEB (See note 1)	Use it to change the frequency at which the cleaning belt solenoid turns on. The notation 'x' represents the number of small-size copies; x=setting.	Settings : 1 ~ 255 Standard : 8
OIL-SPLY	Use it to switch oil supply. 0: by service person 1: by user When the oil starts to run out while the item is set to 'by user', the message "Supply Oil to Fixing Assembly" will be indicated on the control panel.	Setting: 0, 1 Standard: 1
BRSH-MD (See note 1)	Use it to change the sequence of engaging the attraction brush when thick LTRR paper is being fed. 0: engage the brush only when attraction charging is on. 1: engage the brush throughout copying sequence.	Settings : 0 ~ 3 Standard : 1 '2' and '3' are not used.

Item	Description	Remarks
RCPR-MD	Use it to set the functions for the reciprocating motor in the drum cleaning assembly. 2: do not perform reciprocating operation. 3: perform reciprocating operation only during last	Settings : 0 to 4 Standard: 3 Do not use a setting other than '3'.
B-MARGIN	Use it to change the trailing edge margin. 0: 4.5 mm 1: 2.5 mm	See "Changing the Image Trailing Edge Margin."
PRIM-FAN	Use it to select the on/off timing for the primary charging fan. 0: longer activation period for primary charging fan 1: shorter activation period for primary charging fan	Setting: 0, 1 Standard: 1

Note 1:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

Note 2:

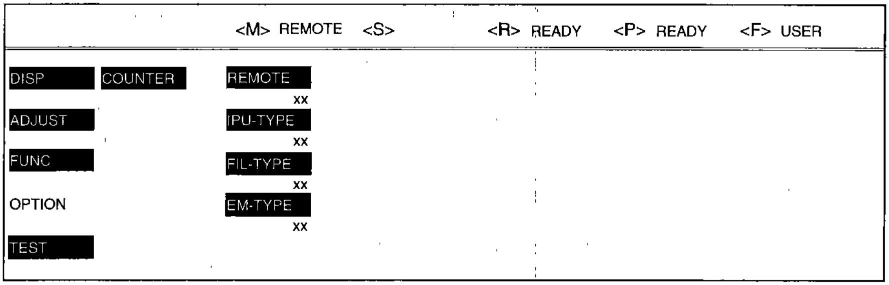
If lines of oil are noted in high-density areas when images are copied on cast-coated paper in thick mode,

1) Change the setting of 'FSPD-S2' under 'P-OPT' of 'OPTION' in service mode from '3' to '2'.
2) The label on the paper used wrap the sheets may recommend copying in thick paper mode; however, advise user to use special paper 2 mode after changing the setting.

Reference

- 'TCLN-MD' will prove effective when the backs of copies tend to become soiled.
- 'TDRM-POS' will prove effective when image faults are caused by residual memory on the drum.
- 'BRSH-MD' will prove effective when color displacement is noted when thick LTRR paper is fed.

3. Selecting Machine Specifications when Using an External Controller


<M> REMOTE <S> <R> READY <P> READY <F> USER
DISP
COUNTER
REMOTE
xx
ADJUST
IPU-TYPE
xx
FUNC
FIL-TYPE
xx
OPTION
EM-TYPE
xx
TEST

Item	Description	Remarks
REMOTE	Enter settings for A, B, and C of the table below. A: Decides whether the Call key should be used as a Remote key or not; if not used as a Remote key, the IPU's operation command activates remote state and, after operation, restores local state. B: Decides whether a move from local state to remote state should be made and whether copy modes set in local state should be retained.	Settings : 0 ~ 7 Standard : 0
IPU-TYPE (See note)	Set it to match the external controller to be connected. 0: standard 1: PS-IPU Ⅲ Ver.1.0 only.	Settings : 0 to 1 Standard : 0
FIL-TYPE (See note)	Use it to select edge emphasis on the output image from the controller to prevent tapering of fine lines. 0: not used 1: standard	Settings : 0 to 1 Standard : 1

Item	Description	Remarks
EM-TYPE	Use it to emulate other models when using the IPU. 0: Value of 'OPTION' 'R-OPT' 'NEW-COL' is set to '0' 1: Value of 'OPTION' 'R-OPT' 'NEW-COL' is set to '1' ■ From the controller to the images, sets the value set by <ADJUST><COL-ADJ><P-ADJ> and <ADJUST><COL-ADJ><P-OFST>. ■ To the reader images, sets the value set by <ADJUST><COL-ADJ><COL-ADJ> and <ADJUST><COL-ADJ><OFST>. 2: Identical to the hue by the IPU10S/CLC800 when the IPU2 (native mode) is connected. ■ The following is set according to the gamma specified by the IPU2: • Switches the LOG table for the IPU. • Switches the masking coefficient. 3: Identical to the hue by the IPU10S/CLC500 when the IPU2 (native mode) is connected. ■ From the controller to the images, sets the value set by <ADJUST><COL-ADJ><P-ADJ> and <ADJUST><COL-ADJ><P-OFST>. ■ To the reader images, sets the value set by <ADJUST><COL-ADJ><COL-ADJ> and <ADJUST><COL-ADJ><OFST>. ■ The following is set according to the gamma specified by the IPU2: • Switches the LOG table for the IPU. • Switches the masking coefficient.	Settings: 0 to 3 Standard: 1

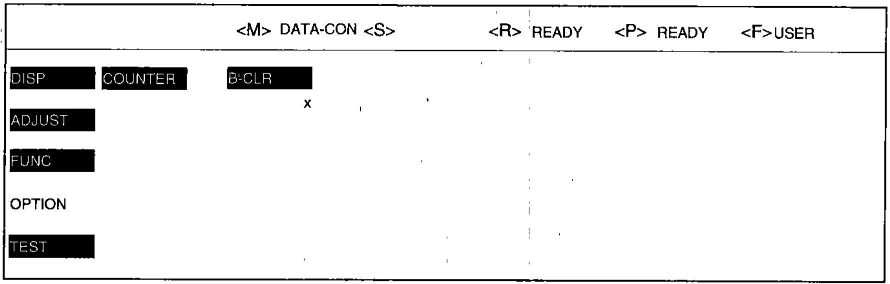
- **Detail of Settings**

Settings	A	B	C
REMOTE = 0,1	Call key	Retain	Local
2,3	Call key	Do not retain	Local
4,5	Remote key	Retain	Local
6,7	Remote key	Do not retain	Local

Note:

The value of the item returns to its default value when the PCB is replaced or the RAM is cleared; you must enter the value newly. If you entered a different value, be sure to record the item and the value on the service label.

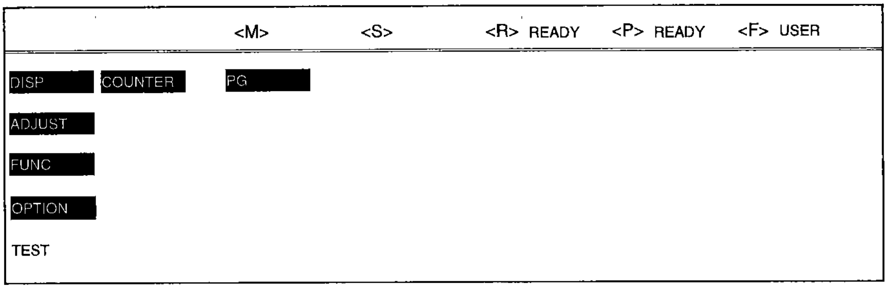
4. When Connected to the Copy Data Controller A1



<M> DATA-CON <S>   <R> READY   <P> READY   <F>USER

Item	Description	Remarks
B-CLR	Use it to indicate whether the Copy Data Controller A1 is connected (recognition will be automatic). 0: Not connected 1: Connected If the setting is '1', an error code (E717) will be issued if the Copy Data Controller A1 is disconnected. To clear 'E717', • Press 'B-CLR'. • Initialize the RAM of the reader controller.	Setting: 0, 1 Standard: 0 As necessary, set it to '0' during service work so as to temporarily disconnect the Copy Data Controller A1.

F. Test Print



<M> <S> <R> READY <P> READY <F> USER

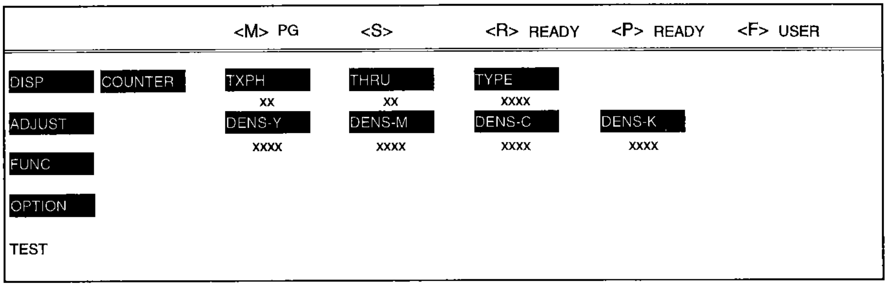
DISP COUNTER PG

ADJUST

FUNC

OPTION

TEST



<M> PG <S> <R> READY <P> READY <F> USER

DISP COUNTER TXPH THRU TYPE

xx xx xxxx

ADJUST DENS-Y DENS-M DENS-C DENS-K

xxxx xxxx xxxx xxxx

FUNC

OPTION

TEST

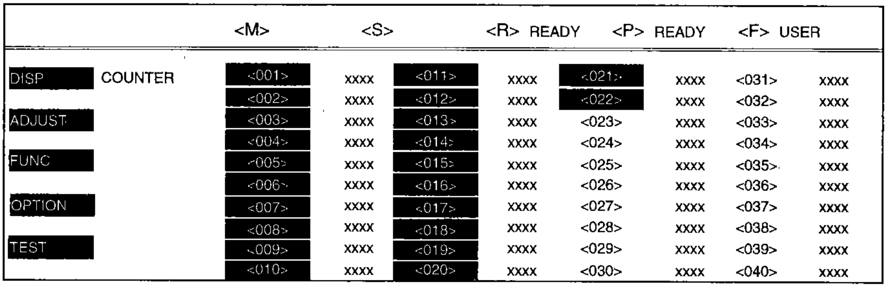
Be sure to return 'TYPE' to '0' when ending test print mode.

Item	Description	Remarks
TYPE	Specify the type of test print. 0 : image from CCD (normal copy) 1 : for R&D 2 : 256 colors 3 : 256 gradations 4 : 16 gradations 5 : entire face in halftone 6 : grid 7 : for R&D 1 8 : for R&D 2 9 : for R&D3 10 : MCYBk horizontal stripe (laser FF) 11 : for R&D 4 12 : YMCBk 64 gradations 13 : BGR 64 gradations 14 : full-color 16 gradations (YMCBk) 15 : full-color light area 16 gradations (YMCBk) 16 : MCYBk horizontal stripe (laser A0)	Enter a number using the keypad (1 through 16); then, press the Copy Start key to generate a test print. To specify the output color for 3, 4, 5, and 6, use color mode (user mode). • Be sure to return to '0' after generating a test print.
DENS-M/C/Y/K	PGTYPE=5 above: specifies the density of each color for full face in halftone.	0 through 255 standard: 128

Item	Description	Remarks
TXPH	Use it switch between text mode and photo mode. 0 : text mode 1 : photo mode Not effective if 'TYPE-6', i.e., grid.	Each press causes it to alternate between '0' and '1'.
THRU	Switches the gate array on the laser controller PCB. Not effective when 'TYPE' is set to '5' (halftone). This is invalid for TYPE5 (halftone). 0 : Use gate array. 1 : Do not use gate array.	

G. Counter

- After '999999', returns to '000000'.
- After pressing a sub item number (except 038, 039, 040) and the indication has reversed, a press on the Clear key causes the counter for the item to turn '000000'. (You cannot clear '014'; instead, clear '011', '012', and '013'.)
- Check the reading of '038' (3rd-level number) whenever you have replaced the cleaning belt for the fixing assembly; if not '0', press 'E005-RLS' of 'FUSER' under 'FUNC' to clear the counter reading.
- Further, executing 'RAM-CLR' for the reader controller PCB causes all sub items to be '00 0000' (except 038, 039, 040).



<M> <S> <R> READY <P> READY <F> USER

DISP	COUNTER	<001>	xxxx	<011>	xxxx	<021>	xxxx	<031>	xxxx
		<002>	xxxx	<012>	xxxx	<022>	xxxx	<032>	xxxx
ADJUST		<003>	xxxx	<013>	xxxx	<023>	xxxx	<033>	xxxx
		<004>	xxxx	<014>	xxxx	<024>	xxxx	<034>	xxxx
FUNC		<005>	xxxx	<015>	xxxx	<025>	xxxx	<035>	xxxx
		<006>	xxxx	<016>	xxxx	<026>	xxxx	<036>	xxxx
OPTION		<007>	xxxx	<017>	xxxx	<027>	xxxx	<037>	xxxx
		<008>	xxxx	<018>	xxxx	<028>	xxxx	<038>	xxxx
TEST		<009>	xxxx	<019>	xxxx	<029>	xxxx	<039>	xxxx
		<010>	xxxx	<020>	xxxx	<030>	xxxx	<040>	xxxx

Item	Description	Item	Description
001	Number of times the Y developing assembly has been used.	013	Number of prints generated using the synthesis mechanism.
002	Number of times the M developing assembly has been used.	014	Number of total prints (copies, + prints, synthesized prints)
003	Number of times the C developing assembly has been used.	015	Number of sheets picked up from the cassette 1.
004	Number of times the K developing assembly has been used.	016	Number of sheets picked up from the cassette 3.
005	Number of Y mono copes.	017	Number of sheets picked up from the cassette 4.
006	Number of M mono copies made.	018	Number of sheets picked up from the multifeeder.
007	Number of C mono copies made.	019	Number of sheets picked up at the duplexing unit.
008	Number of K mono copies made.	020	Number of scans made by the scanning system.
009	Number of 3-color copies made.	021	Number of copies made using the film projector.
010	Number of 4-color copies made.	022	Number of sheets picked up from the RF.
011	Number of total copies made.	023	reserved
012	Number of total prints made.	024	reserved

Item	Description	Item	Description
025	reserved	038	Represents the number of times the solenoid turns on between detection of the absence of the web and indication of 'E005'. (initially, 200; incremented by '1' for each activation)
026	reserved		
027	reserved		
028	reserved		
029	reserved		
030	reserved	039	Represents the number of copies made until the primary corona wire automatic cleaning mechanism operates next time (initially, '2000': a single copy decreases the count by '1'; a 4C copy, by '4'; a 3C copy, by '3'; and a mono-C copy, by '1').
031	reserved		
032	reserved		
033	reserved		
034	reserved		
035	reserved	040	Represents the number of copies made until the polishing roller cleaning mechanism operates next time (initially, '1200'; decreased by 1 for copy).
036	reserved		
037	reserved		

H. Adjusting the Electrical system

(For descriptions on how to adjust the mechanical system, see P.4-105.)

The copier's major PCBs are equipped with variable resistors (VR), and all VRs are adjusted at the factory with high precision.

As a rule, do not touch those VRs not discussed herein in the field, as they require high precision.

1. After Replacing Major Parts

a. After Replacing the Developer (MCY)

1) Execute 'STIR' in service mode ('FUNC').
2) Have the machine read the toner density data using 'INIT-M, INIT-C, INIT-Y' under 'INSTALL' in service mode ('FUNC').
3) Record the result (those indicated by * in Figure 3-1104) on the service label.
4) Leave service mode, and turn off and then on the power switch.

b. After Replacing the Developer (Bk)

1) Execute 'STIR' in service mode ('FUNC').
2) Have the machine read the toner density data using 'INIT-K' under 'INSTALL' in service mode ('FUNC').
When 'INIT-K' ends, take notes of the value of 'SGNL-K'.
3) Select 'DC-CON' under 'FUNC', and enter a value obtained by adding '37' to the value you took note of in step 2) into 'SGNL-K'.
4) Press 'SEND', and leave service mode; then, turn off and then on the power switch.
If you have replaced all four colors, have the machine read the toner density data using 'INIT-4' under 'INSTALL' in service mode ('FUNC').

c. After Replacing the Developing Assembly (MCYK), Toner Density Sensor (MCY), or Black Toner Density Sensor

1) Replace the developer.
2) Go through steps under a. or b. above.

d. After Replacing the Photosensitive Drum Unit

1) After replacing the cleaning blade, apply lubricant.
2) Install the photosensitive drum.
3) Clean the window of the black toner density sensor (dry wiping) ; and apply lubricant to the No. 2 blade.
4) Replace the black developer.
5) Go through the steps under b. given for the replacement of the developer (Bk).

		TYP			
	B5-C1				
	A4-C1				
	STMTR-C2				
	A4R-C2				
	STMTR-C3				
	A4R-C3				
	STMTR-C4				
	A4R-C4				
	A6R-MF				
	A4R-MF				
	A4-MF				
*	SGNL-M				
*	SGNL-C				
*	SGNL-Y				
*	SGNL-K				
*	SGNL-D				
*	REF-M				
*	REF-C				
*	REF-Y				
*	REF-K				
*	REF-D				
*	SGAIN-M				
*	SGAIN-C				
*	SGAIN-Y				
*	SGAIN-K				
*	REFG-K				
	EPOT-OFST				
	ATT-T-A				
	ATT-T-B				
	RG-XA				
	RG-XB				
	RG-Y				
	TR-DELAY				
	BODY-NO				

FS5-8837

Figure 3-1104

	TYP		
CVR-TYPE			
ADJ-X			
ADJ-Y			
ADJ-S			
ED-ADJ-X			
ED-ADJ-Y			
ADJ-J			
EC-GLASS			
DA-XS			
DA-XE			
DA-YS			
DA-YE			
DS-DOC			
DS-PRJ			
DS-OHP			
ADJ-M			
ADJ-C			
ADJ-Y			
ADJ-K			

		TYP		
	OFST-M			
	OFST-C			
	OFST-Y			
	OFST-K			
	SEG-ADJ			
	BC-ADJ			
	LGCR-IPU			
*	LAMP-DT			
*	GAIN-B			
*	GAIN-G			
*	GAIN-R			
*	TARGET-B			
*	TARGET-G			
*	TARGET-R			

Figure 3-1105

e. After Replacing the DC Controller PCB

1) Replace the developer (all four colors), and execute 'STIR-4' and 'INIT-4' under 'INSTALL' in service mode ('FUNC').
2) Record the results (those indicated by * in Figure 3-1104) on the service label; however, for 'SGNL-K', record a value obtained by adding '37' to the result.
3) Enter the values recorded on the service label (those not indicated by *) using 'DC-CON' under 'FUNC'; however, for 'SGNL-K', enter the value recorded on the service label.
4) When you have pressed all values, turn off and then on the power switch.
5) Set 'PASCAL' under 'ADJUST' in service mode to '1'.

f. After Replacing the ROM on the DC Controller PCB

1) Execute 'RAM-CLR' under 'D-CON' in service mode ('FUNC').
2) Go through the steps under"e. After Replacing the DC Controller PCB," starting with step 2).

g. After Replacing the Reader Controller PCB

1) Enter the values recorded on the service label (those indicated by * in Figure 3-1105) using 'R-CON' under 'FUNC'.
2) Execute 'AUTO-ADJ' under 'CCD' in service mode ('FUNC'), and record the result (those indicated by * in Figure -3-1105) on the service label.

- If a projector is installed, execute 'PROJ-CCD' under 'PRJ-ADJ' in service mode ('FUNC').

3) When you have entered all the values, turn off and then on the power switch.

h. After Replacing the ROM on the Reader Controller PCB

1) Execute 'RAM-CLR' of 'R-CON' under 'FUNC' in service mode.
2) Go through the steps for "g.After Replacing the Reader Controller PCB" starting with step 1.

i. After Replacing the Laser Unit, Laser Controller PCB

1) Adjust the laser power.
2) Adjust the laser.
3) Replace the black developer.
4) Execute 'INIT-K' of 'INSTALL' under 'FUNC' in service mode to read the toner density data.

j. After Replacing the Scanning Lamp, Standard White Plate, Lamp Regulator, Lamp Reflecting Plate, or Analog Processor PCB

1) According to 'AUTO-ADJ' of 'CCD' under 'FUNC' in service mode, read in the data.

k. After Replacing the Transfer Drum

1) Execute the following in the order given in service mode:

```
ADJUST
  IMG-REG
        REG-XA
        REG-XB
        REG-Y
FUNC
  ATTRACT
        ATT-T-A
        ATT-T-B
        TR-DELAY
```

l. After Replacing the BD Unit (beam detector assembly)

Make adjustments as follows whenever you have replaced the BD unit:

1) Set the meter to the VAC RANGE.
2) Connect the + probe of the meter to the check pin TP301 on the BD PCB and the – probe to the check pin GND.
3) Activate the laser in service mode ('FUNC'→'LASER'→'POWER').
4) Loosen the screw used to fix the BD unit in place, and fix it in position where the tester output reading is maximum.

2. Adjusting the Laser Power

You must adjust the laser power whenever you have replaced the laser scanner, laser unit, or laser driver PCB.

If you have adjusted the laser power or laser, you must always replace the Bk developer, adjust the Bk toner density VR, and execute Bk toner density initial settings read-in.

a. Tools

- Laser power checker (FY9-4013)
- Digital multimeter (CK-0436)

Caution:
The output of the laser power checker tends to change over time; be sure to have it calibrated using the special laser power checker calibrator at one-year intervals.

1) Turn off the power switch.
2) Open the left door, remove the four screws ①, and remove the left inside cover.

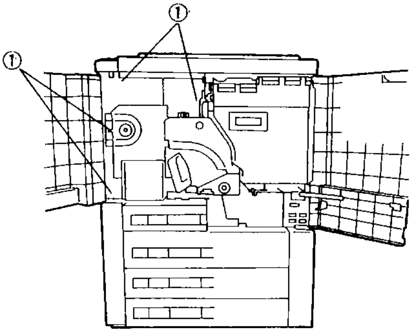


Figure 3-1106

3) Loosen the two screw ②, and remove the laser power checker slot cover③.

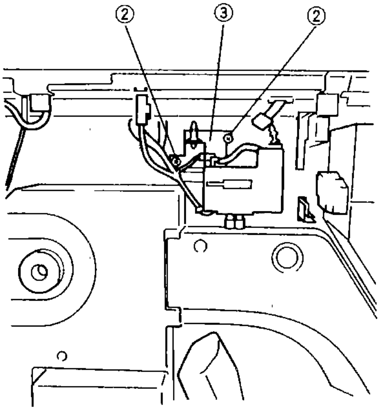


Figure 3-1107

4) Set the laser power checker switch to '2'.
5) While keeping the light-receiving face of the laser power checker ④ on the right, insert the laser power checker into the slot ⑤.

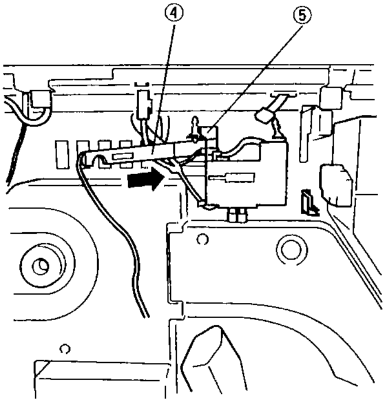


Figure 3-1108

6) Insert the lead wire of the laser power checker into the digital multimeter, and set the range to 200 mVDC.
7) Insert the door switch actuator into the front door switch, and turn on the power.
8) Activate service mode, and select 'POWER' of 'LASER' under 'FUNC' in service mode.
9) Check that the reading is as indicated in the label on the laser unit. If not, turn VR956 for rough adjustment, and turn VR955 for fine adjustment until the reading matches the value indicated in the label.

Making Adjustments

1) Open the front left door.
2) Remove the two hopper stoppers, and open the hopper.
3) Adjust VR956 and VR955 by inserting a screwdriver through the hole in the front side plate.

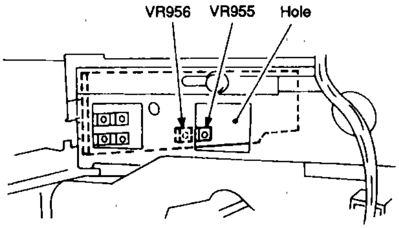
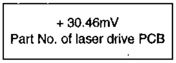


Figure 3-1109

Caution:

- Check the upper limit recorded in the label attached to the laser unit in advance.

Label for Pmax



+ 30.46mV
Part No. of laser drive PCB

Figure 3-1110

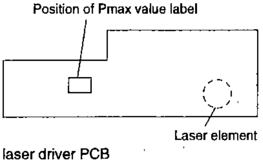


Figure 3-1111

- Turn VR956 slowly while checking the output of the laser power checker; avoid increasing the laser power excessively.
- A counterclockwise turn of VR956 lower the laser output.
- Make sure that the upper limit recorded in the label is not exceeded; otherwise, the laser diode may become damaged.

10) Press the C/▼ key.
11) Adjust the laser.

3. Adjusting the Laser

Caution:
Be sure to adjust the laser power before adjusting the laser.

1) Select 'TX-V00' of 'LASER' under 'FUNC' in service mode.
2) Turn VR952 clockwise, and make notes of the value at which it stops changing (offset value).
3) Turn VR952 until the following value is obtained true:
   offset value + 0.1 mV
   (tolerance $\pm^{0}_{0.1}$mV)
4) Likewise, make adjustments for 'TX-Vff, PH-V00, PH-VFF' in the order given and with reference to the following table; to stop the laser output, press the C/▼ key.

	VR	Standards (mV)
TX-V_{00}	952	offset value +0.1 $\pm^{0}_{0.1}$
TX-V_{FF}	951	0.8 x Pmax + 0.4 ±0.3
PH-V_{00}	954	offset value + 0.1 $\pm^{0}_{0.1}$
PH-V_{FF}	953	0.8 x Pmax + 0.4 ±0.3

Table 3-1102

5) Press the Reset key to deactivate service mode; then, turn off the power switch.
6) Remove the laser power checker, and fix the slot cover in place.
7) Install the IP cooling fan duct and the left inside cover.

4. Checking the Environment Measuring PCB

Use the environment measuring PCB checking tool (TKN-0457) and environment sensor calibrating tool (TKN-0456) to check the environment measuring PCB and environment sensor.

① Checking the Environment Measuring PCB

1) Turn off the power switch.
2) Open the hopper assembly.
3) Remove the environment sensor from the environment measuring PCB; in its place, insert the environment measuring PCB checking tool (TKN-0457).
4) Insert the door switch actuator, and turn off the power switch.
5) Set the meter to the 30VDC range.
   Check that the voltage between J1-1 (+) and J1-2 (–) of the environment measuring PCB is 24 ±2.4 V.
   If it is not 24±2.4 V, check the DC power supply PCB (DCP1).
6) Activate service mode, and select 'DISPLAY'.
7) Check the temperature/humidity on the ANALOG screen.
   BODY °C .... 25 ±5
   BODY % .... 40 ±10
8) Check that the reading is within the specification.
   If it is not within the specification, go to step 9).
   If it is within the specification, go to step 14).
9) Press the Reset key, and turn off the power switch.
10) Disconnect connector J1 from the environment PCB.
11) Turn on the power switch, and activate service mode; then, select 'DISPAY'.
12) Check the temperature/humidity on the ANALOG screen.
    BODY °C .... 25 ±5
    BODY % .... 36 ±10
13) Check that the reading is within the specification.

Reference:

If it is outside the specification, suspect a fault in the DC controller PCB.

14) Press the Reset key.
15) Turn off the power switch.
16) Connect the connector J1 to the environment measuring PCB.
17) Remove the environment measuring PCB from the environment measuring PCB; in its place, insert the environment sensor.
18) Replace all covers.

② Checking the Environment Sensor

1) Check the environment measuring PCB.
2) Turn on the power, and leave the copier on for 5 min.
3) Activate service mode, and select 'DISPLAY'.
4) Check and take notes of the temperature/humidity on the ANALOG screen (data A).
   BODY °C .... data A1
   BODY % .... data A2
5) Press the Reset key, and turn off the power switch.
6) Remove the environment sensor from the environment measuring PCB; in its place, insert the environment sensor calibrator tool (TKN-0456).
7) Turn on the power switch, and leave the copier for 5 min.
8) Activate service mode, and select 'DISPLAY'.
9) Check and take notes of the temperature/humidity on the ANALOG screen (data B).
   BODY °C .... data B1
   BODY % .... data B2
10) Compare data A and data B.

- difference between data A1 and data B1 is 0 ±5
- difference between data A2 and data B2 is 0 ±20

If the difference between data A and data B is outside the specification, replace the environment sensor.

11) Press the Reset key, and turn off the power switch.
12) Remove the environment sensor calibrator from the environment measuring PCB; in its place, insert the environment sensor.
13) Replace all covers.

Caution:
The environment sensor calibrating tool (TKN-0456) is adjusted at the factory with high precision; keep it in an air-tight container with a drying agent.

5. Storing the Cassette/Multifeeder Paper Width Basic Settings (FUNC)

Execute cassette/multifeeder paper width basic settings registration under the following conditions:

- After replacing the copier's paper width detecting VR (including the multifeeder).
- After adjusting the registration (front, rear) for the cassette.

For the cassette 1, you must register for B5 and A4; for each of the cassettes 2 through 4, you must register for STMTR and A4R; for the multifeeder, you must register for A6R, A4R, and A4.

a. Cassettes 1 through 4

1) Slide out the cassette for which you want to register the basic settings, and set the paper width guide plate inside the cassette to A4 (cassette 1) or A4R (cassettes 2 through 4).
2) Set the cassette in the copier.
3) Check that the control panel displays the basic settings on the CST-AD screen for 'FUNC' of service mode.
4) Select the size of the cassette for which you want to register the basic settings.
   C1-A4
   C2-A4R
   C3-A4R
   C4-A4R
5) Check that basic setting 1 has been registered.
6) Slide out the cassette for which you want to register the basic settings, and set the paper width guide plate to B5 (cassette 1) or STMTR (cassettes 2 through 7).
8) Set the cassette in the copier.
9) Check that the control panel displays the basic setting on the CST-AD screen under 'FUNC' of service mode.
10) Select the size of the cassette for which you want to register the basic settings.
   C1-B5
   C2-STMTR
   C3-STMTR
   C4STMTR
11) Check that basic setting 2 has been registered.

b. Multifeeder

1) Set the multifeeder manual feed guide to A6R (105 mm).

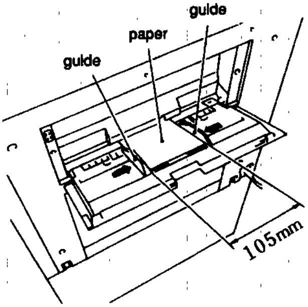


Figure 3-1112

2) Check that the control panel displays the basic settings on the CST-AD screen under 'FUNC' of service mode.
3) Select the size for which you want to register the basic setting.
   MF-A6R
4) Check that basic setting 1 has been registered.
5) Set the multifeeder manual feed guide plate to A4R (210 mm).
6) Check that the control panel displays the basic settings on the CST-AD screen under 'FUNC' of service mode.
7) Select the size for which you want to register

the basic settings.
MF-A4R

8) Check that basic setting 2 has been registered.
9) Set the multifeeder manual guide plate to A4 (297 mm).
10) Check that the control panel displays the basic settings on the CST-AD screen under 'FUNC' of service mode.
11) Select the size for which you want to register the basic settings.
MF-A4
12) Check that basic setting 3 has been registered.

Caution:
Whenever you have registered basic settings, be sure to record them on the Service Label.
Further, if you have replaced the DC controller PCB, you must store the settings recorded on the Service Label using 'DC-CON' under 'FUNC' of service mode.

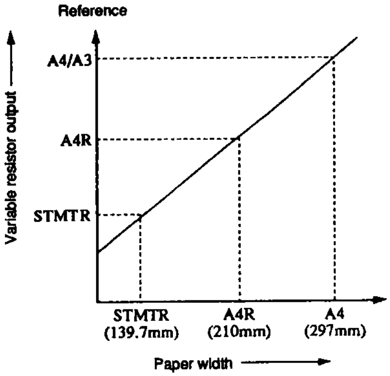


Figure 3-1113

I. Test Print

The copier has 12 types of test print patterns, each one of which may be used to identify a specific image problem. If a problem in copies made in normal mode is not noted in a test print, you may suspect a problem in the scanning system, CCD, analog processor, or image processor.

1. Selecting a Test Print Pattern

1) Set the copy count, copy paper size, and color mode*.
   * The color mode is effective when PGTYPE=3, 4, 5, 6.
2) Activate service mode (✻ → 2, 8→ ✻)
3) Press 'TEST' under 'OPTION'.
4) Select 'PGTYPE'.
5) Enter a PGTYPE number.
6) Press the Copy Start key.

Caution:
You must return the setting of 'PGTYPE' to '0' after finishing checks using test prints.

- **Setting the Test Print Density (DENS-Y, -M, -C, and -Bk)**

This is effective when generating test prints when 'PGTYPE=5 or 6'.

1) Set the density by pressing 'DENS-Y, -M, -C, or -K'.

PGTYPE	Description
0	Image from CCD (normal copy)
1	For R&D
2	256 colors
3	256 gradations
4	16 gradations
5	Full-face halftone
6	Grid
7 – 9	For R&D
10	MCYBk horizontal stripe (laser FF activation)
11	For R&D
12	YMCBk 64 gradations
13	BGR64 gradations
14	Full color 16 gradations (YMCBk)
15	Full color light area 16 gradation (YMCBk)
16	MCYBk horizontal stripe (laser A0 activation)

Table 3-1103

2. Horizontal Test Print (PGTYPE= 10, 16)

With the horizontal test print, you can check the density of dark areas for each color, balance among colors, and white lines in relation to development.

a. Dark Area Density of Each Color and Balance among Colors

The density must not be appreciably low.

If the density is too low for a mono color, suspect the developing assembly used for light color.

If the density is too low for all colors, suspect the laser system.

b. White Lines (development)

If, for example, white lines are noted within the cyan areas of the copy image, suspect the developing assembly used for cyan.

c. Uneven Density between Left and Right

If uneven density between left and right occurs in the same way for all colors, suspect that the developing assembly spacer or butting block is soiled or the height of the primary corona wire is not correct.

d. Image Position (left/right)

If the position of the cassette holder or 'ADJ-X, Y' setting is not correct, copy paper and images cannot be aligned correctly, eliminating the non-image width.

This will lead to stray toner, soiling the inside of the machine.

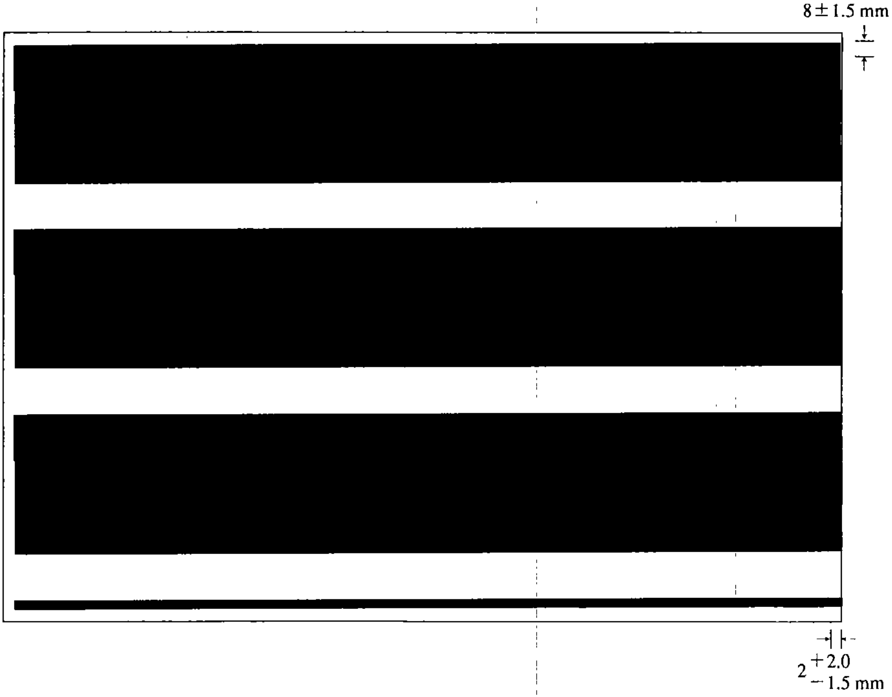


Figure 3-1114

3. 256-Color Test Print (PGTYPE=2)

With the 256-color test print, you can mainly check the hues.

The 256-color test print represents 256 colors in 16x16 frames running from the leading edge of the copy paper.

a. Tinges of 256 Colors

The tinges shown in Figure 3-1115 must be reproduced.

If the tinges are different, suspect deterioration of the developer, deterioration of the photosensitive drum, or mixing of developers.

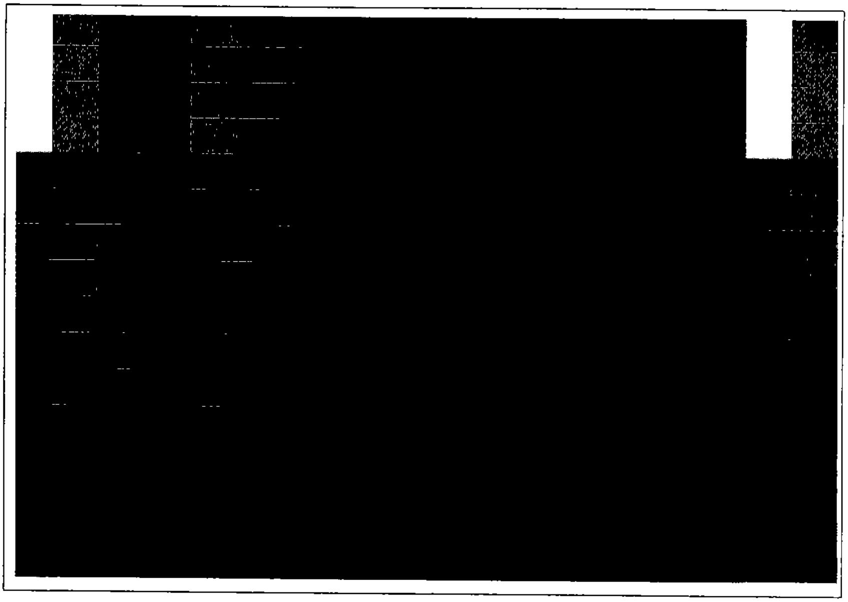


Figure 3-1115

4. 256-Gradation Test Print (PGTYPE=3)

You may specify three colors and generate a test print to check the gray balance for all densities between density 0 and 255.

a. Gradation

You can check the gradation of all densities between 0 and 255.

b. Color Balance (between colors; 3-color copying)

You can check the gray balance of all densities between 0 and 255 by specifying 3-color printing when generating a test print.

Caution:
You can specify mono or 3-color mode in user mode.

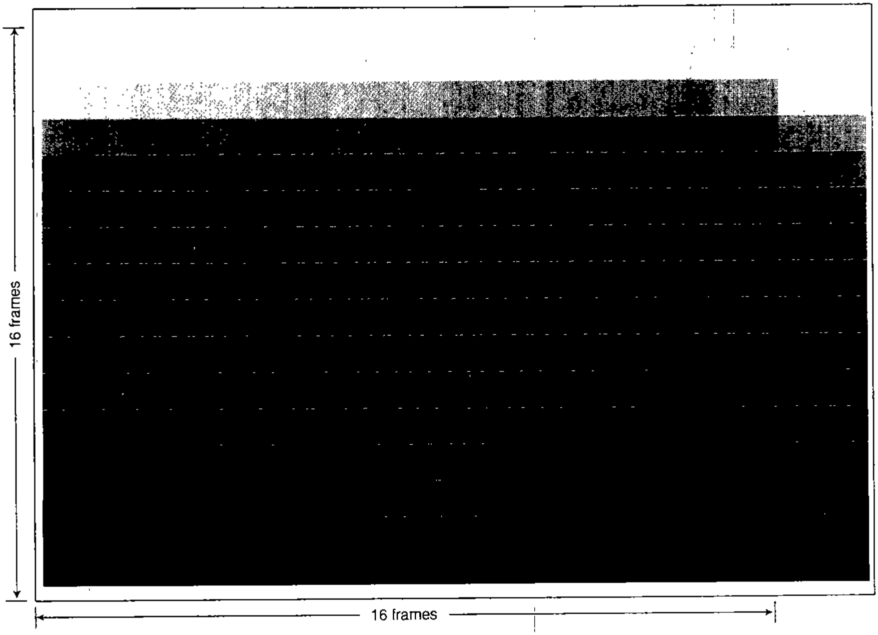


Figure 3-1116

5. 16-Gradation Test Print (PGTYPE=4)

With the 16-gradation test print, you may mainly check the gradation, fogging, white lines, uneven density between left and right, and balance among colors.

a. Gradation

If the density in 16 gradations is not as shown in Figure 3-1117, suspect the laser system.

b. Fogging

If fogging is noted only in the white area shown in Figure 3-1117, suspect the developing system, photosensitive drum, or laser adjustment.

c. White Lines

If white lines are noted on the image, suspect the developing system.

d. Uneven Density Between Left and Right

If uneven density is noted between left and right, suspect chipping of the developing spacer, soiling of the butting block, or the height of the primary corona wire.

e. Balance Among Colors (3-color copies)

You can check the gray balance for each density by specifying 3-color mode and generating a test print.

Caution:
You can specify mono or 3-color mode in user mode.

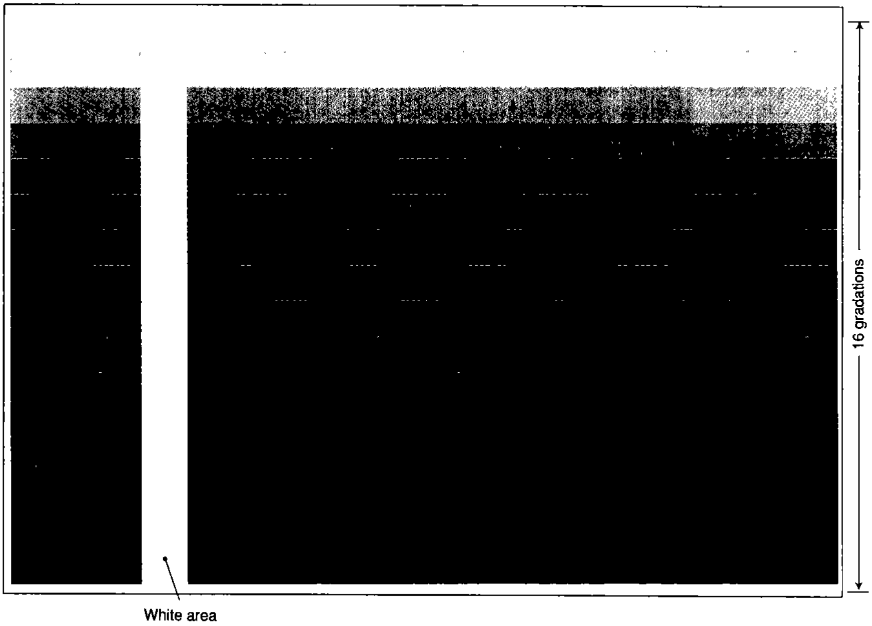


Figure 3-1117

6. Halftone Test Print (PGTYPE=5)

With the halftone test print, you can mainly check transfer failure, black lines, white lines, and uneven pitch.

a. Transfer Failure

If transfer failure occurs, suspect the transfer drum sheet or static eliminator.

b. Black Lines

If black lines occur, suspect scratches in the photosensitive drum or soiling of the primary corona wire.

c. White Lines

If white lines occur at the same location for all colors, suspect the transfer drum sheet.

If the problem occurs at different locations or the problem is limited to a single color, suspect the developing assembly.

d. Uneven Pitch

If uneven pitch occurs, suspect the following:

• scanner*	0.5 mm pitch (approx.)
• developing cylinder	42 mm (approx.)
• registration roller drive gear	1.6 mm (approx.)

*Does not occur on a test print.

Caution:
You can specify mono or 3-color mode in user mode.

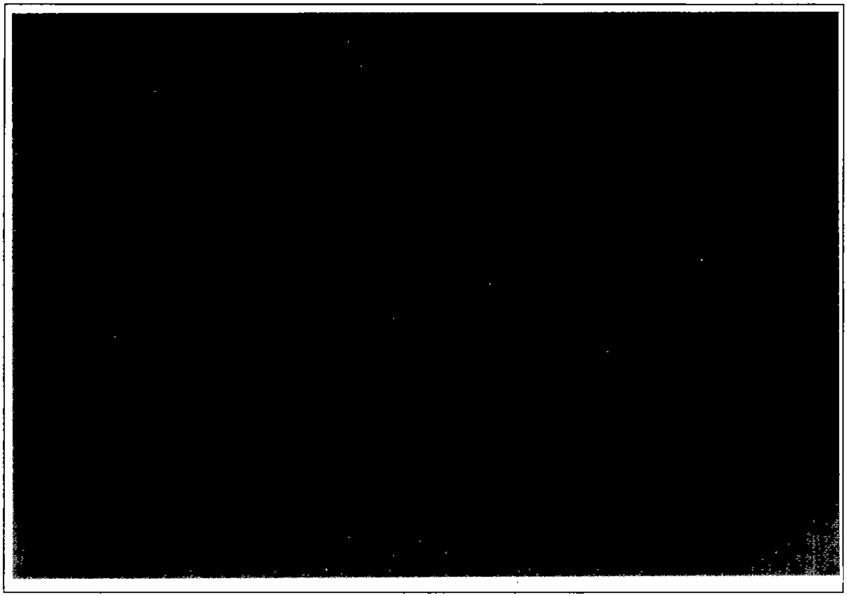


Figure 3-1118

7. Grid Test Print (PGTYPE=6)

With the grid test print, you can mainly check color displacement, angle, and linearity.

a. Color Displacement

If color displacement occurs, suspect the transfer drum sheet.

Even if color displacement occurs on a test print, the black text processing mechanism at work in normal copying mode may correct it so that the problem may be absent on copies. The problem may be ignored if it does not appear on normal copies; keep in mind that this test print is used to identify the point of color displacement and the color when color displacement is noted on regular copies.

b. Angle and Linearity

If a angle or linearity problem is noted, suspect displaced laser beam or BD.

Caution:
You can specify mono or 3-color mode in user mode.

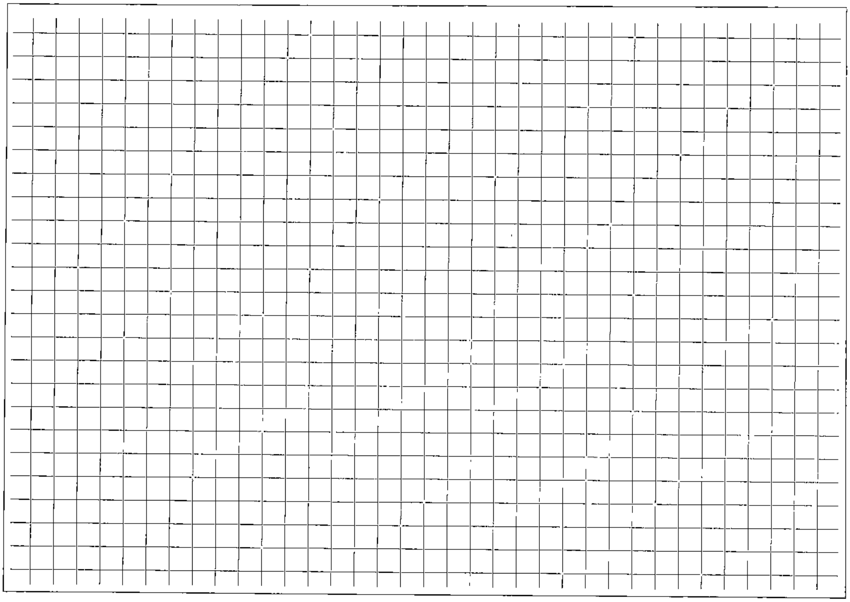


Figure 3-1119

8. YMCBk 64-Gradation Test Print (PGTYPE=12)

With the YMCBk 64-gradation test print, you can check each of the colors (YMCBk) at a glance.

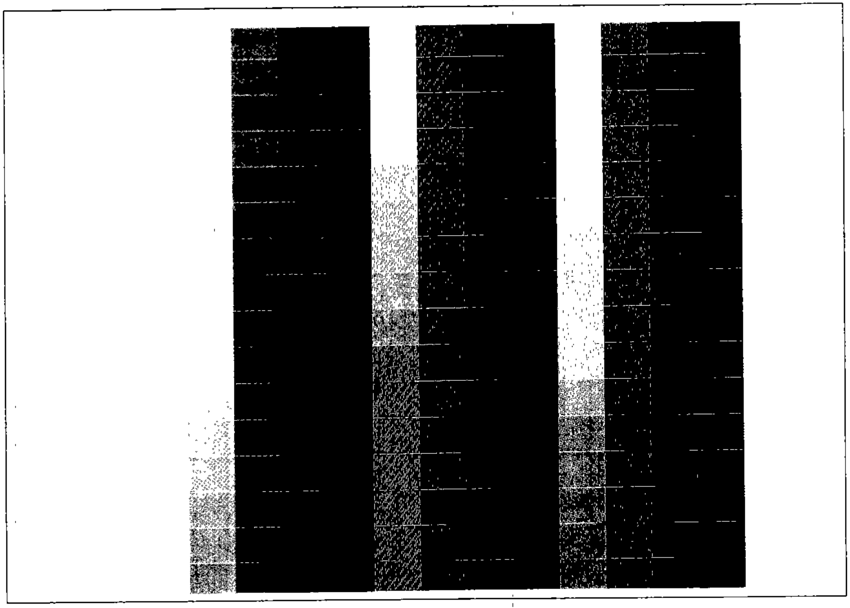


Figure 3-1120

9. BGR 64-Gradation Test Print (PGTYPE=13)

With the BGR 64-gradation test print, you can mainly check the gray balance and the gradation of each of the colors (2-color; BGR).

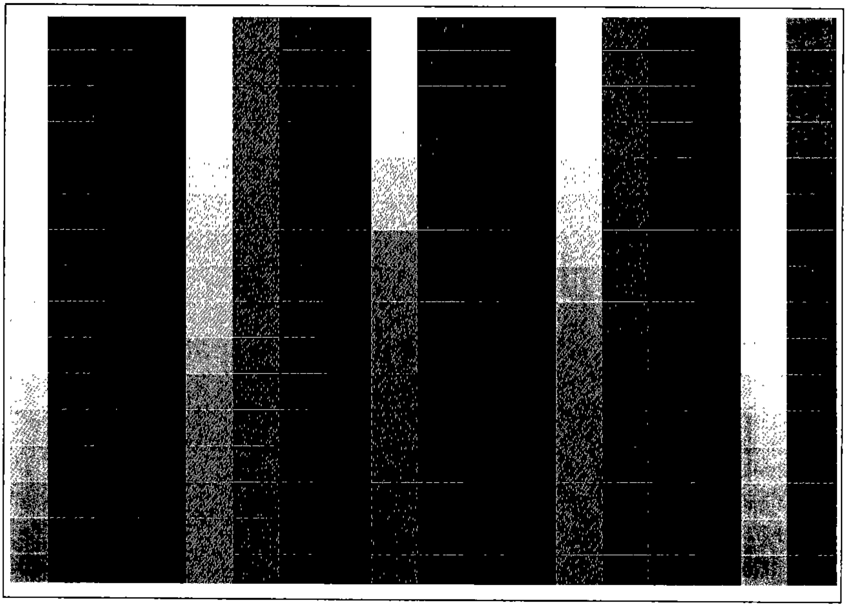


Figure 3-1121

10. Full-Color 16-Gradation (YMCBk) Test Print (PGTYPE=14)

With the full-color 16 gradation (YMCBk) test print, you can mainly check the gray balance, gradation of each mono color (YMCBk), and fogging.

a. Gray Balance

Check if each color has uniform density in the gray scale area.

Use the contrast potential for adjustments.

b. Gradation

Check the density difference and gradation of each mono color (YMCBk).

c. Fogging

If the white area has fogging, suspect the developing system, photosensitive drum, and laser adjustment.

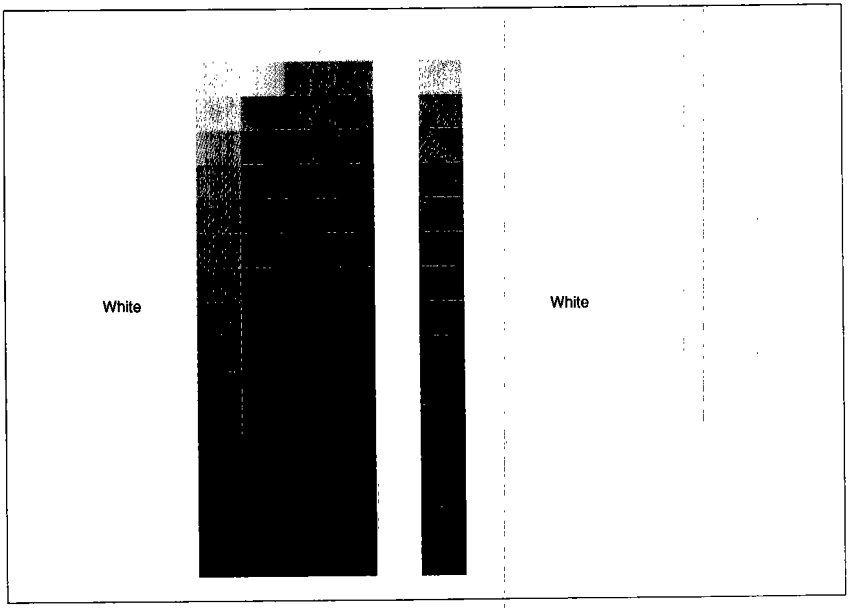


Figure 3-1122

11. Full-Color Light Area 16-Gradation (YMCBk) Test Print (PGTYPE=15)

With this test print, you can check the gray balance of the light area or the gradation of each mono color (YMCBk) with more ease than PGTYPE=14.

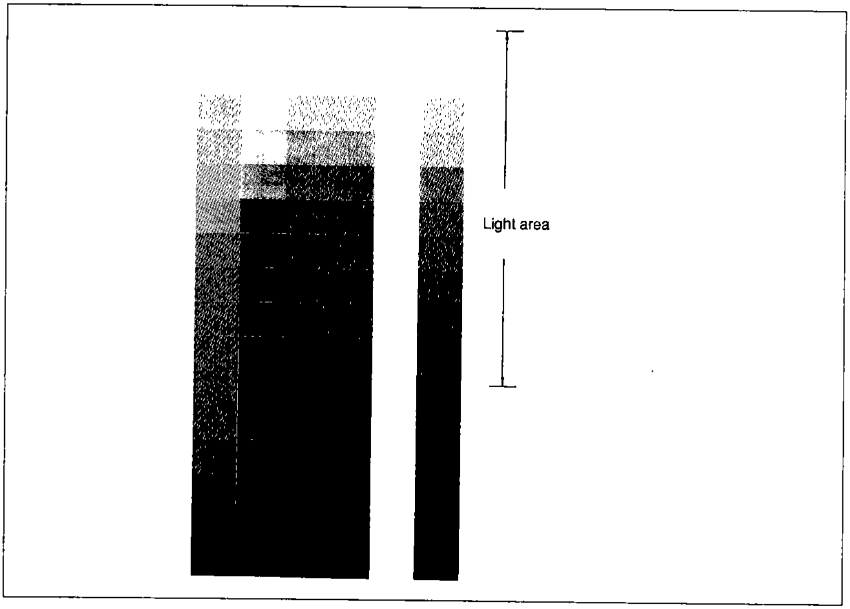


Figure 3-1123

XII. SELF DIAGNOSIS

The microprocessors on the image processor PCB and DC controller PCB are equipped with a self diagnosis mechanism that checks the condition of the copier (sensors, in particular) as needed and indicates a code on the control panel to identify the error.

Go through the table for the description of each code and when checks are made; the codes within a code provide detailed description and may be checked in 'JAM/ERROR' under 'DISPLAY' of service mode.

Code	Cause	Description	
E000	See descriptions under each classification that follows.	xx represents a heater. xx=01: upper heater xx=02: lower heater	
	Fixing thermistor (short circuit) SSR (short circuit) DC controller PCB (faulty)	xx0x	Overheating error
		xx01	The overheating detection circuit on the DC controller PCB has detected an abnormal rise in temperature (220°C or more).
		xx02	The thermistor has detected a temperature of 210°C or more.
	Fixing thermistor (poor contract, open circuit) Fixing heater (open circuit) SSR (faulty) DC controller PCB (faulty)	xx1x	The heater does not turn on normally in response to the heater ON command.
		xx2x	The temperature does not rise within a specific period of time when the temperature is controlled to 130°C or less.
		xx21	The temperature does not increase by 3°C or more in 4 min after the heater has turned on.
		xx3x	The temperature does not rise within a specific period of time when the temperature is controlled to 130°C or more.
		xx31	During temperature control (after 130°C), an increase in temperature of 1° or more is not noted in 2 min after the heater has turned on.
		xx32	During temperature control (after 130°C), an increase in temperature of 5° or more is not noted in 3 min after the heater has turned on.
		xx4x	An error has occurred, i.e., the temperature is below the specified value when it is controlled during standby.
		xx5x	An error has occurred, i.e., the temperature is below the specified value when it is controlled during printing operation.

Table 3-1201

Code	Cause	Description	
E004	SSR (short circuit)	0001	The SSR is on even though the microprocessor on the DC controller PCB has turned off the SSR drive signal for the fixing heater.
		0002	The SSR is on even though the microprocessor on the DC controller PCB has turned off the SSR drive signal for the cassette heater/drum heater.
E005	• Cleaning belt (inside the fixing assembly; taken up) • Cleaning belt length sensor (PS10; faulty) • DC controller PCB (faulty)	As many as 2000 copies have been made since a warning has been issued in response to detection of the cleaning belt lever by the cleaning belt length sensor.	
E006	• Fixing assembly drawer connector (faulty) • DC controller PCB (faulty)	The connect signal 'CONNECT' of the fixing drawer connector has gone '0'.	
E008	• Oil pump drive solenoid (SL12; faulty) • Fixing oil level sensor (PS9; faulty) • Oil supply path (faulty) • Fixing oil (inadequate)	The presence of oil is not detected when 100copies have been made after the fixing oil level sensor detected the absence of oil and indecated a massage.	
E010	• Main drive system (overload) • Main motor (M4; faulty) • DC controller PCB (faulty)	The main motor ready signal (M4RDY*) is '1' for 0.5 sec or more while the main motor is rotating.	
E012	• Drum home position sensor (PS38; faulty) • DC controller PCB (faulty)	0001	• The drum home position signal (PGHP) is not generated within 4 sec after the drum motor drive signal has been generated. • The drum home position signal (PGHP) is generated within 2 sec after the drum motor drive signal has been generated.
	• Drum drive system (overload) • Drum motor (error) • DC controller PCB (faulty)	0002	The drum motor ready signal (M2RDY) is '1' for 0.5 sec or more while the drum motor is rotating.

Code	Cause		Description
E013	• Waste toner feeding screw (error) • DC controller PCB (faulty)		The detecting switch (MS4) is pressed after the waste toner feeding screw has become unable to rotate.
E014	• Fixing motor (M5; error) • DC controller PCB (faulty)		The clock pulses of the fixing motor cannot be detected.
E015	• Pick-up motor (M6; error) • DC controller PCB (faulty)		The clock pulses of the pick-up motor cannot be detected.
E016	• Photosensitive drum cleaner reciprocating motor (M9; faulty) • DC controller PCB (faulty)		The photosensitive drum cleaner reciprocating motor drive circuit on the DC controller PCB has detected an overcurrent for 0.1 sec or more.
E020	See descriptions under each classification that follows.		Toner Density Error xx represents the color of the developing assembly. xx=00: MCYBk in common xx=01: M xx=02: C xx=03: Y xx=04: Bk In the descriptions, the notation SGNL refers to the toner density signal and REF, reference signal.
	• Toner density sensor (faulty) • Stirring (developer, inside the developing assembly) The following applies to Bk only: • Stray light (to the sensor assembly; cover absent, front door open) • Photosensitive drum (deterioration)	xx00	The connector has disengaged. The value of 'REF' is '50' or lower
		xx10	At Time of Setting Initial Data (e.g., installation) The variation of M-SGNL, C-SGNL, and Y-SGNL is '41' or more or the variation of K-SGNL is '102' or more when sampling the density data 10 times.
		xx11	At Time of Setting Initial Data (e.g., installation) The variation of M-REF, C-REF, any-REF is '41' or more or the variation of K-SGNL is '102' or more when sampling the density data 10 times.

Code	Cause	Description	
E020	• Toner density sensor (faulty) • Stirring (developer, inside the developing assembly) The following applies to Bk only: • Stray light (to the sensor assembly; cover absent, front door open) • Photosensitive drum (deterioration)	xx20	At Time of Setting Initial Data (e.g., installation) The variation of M-SGNL, C-SGNL, and Y-SGNL is '41' or more when sampling the density data 100 times or the variation of K-SGNL is '102' or more when sampling the density data 10 times.
		xx21	At Time of Setting Initial Data (e.g., installation) The variation of M-REF, C-REF, and Y-REF is '41' or more when sampling the density data 100 times or the variation of K-REF is '102' or more when sampling the density data 340 times.
		xx30	At Time of Setting Initial Data (e.g., installation) The value of M-SGNL, C-SGNL, and Y-SGNL that has been averaged after sampling is '777' or less or the value of K-SGNL is '163' or less.
		xx31	At Time of Setting Initial Data (e.g., installation) The value of M-REF, C-REF, and Y-REF that has been averaged after sampling is '144' or less or the value of K-REF is '777' or less.
		xx32	At Time of Setting Initial Data (e.g., installation) The value of SGAIN-M/-C/-Y/-K is '0'.
		0433	At Time of Setting Initial Data (e.g., installation) The value of REFG-K is '0'.
		xx40	At Time of Setting Initial Data (e.g., installation) The value of M-SGNL, C-SGNL, and Y-SGNL that has been averaged after sampling is '859' or more or the value of K-SGNL is '410' or more.

Code	Cause	Description	
E020	• Toner density sensor (faulty) • Stirring (developer, inside the developing assembly) The following applies to Bk only: • Stray light (to the sensor assembly; cover absent, front door open) • Photosensitive drum (deterioration)	xx41	The value of M-REF, C-REF, and Y-REF that has been averaged after sampling is '920' or more or the value of K-REF is '859' or more.
		xx42	At Time of Setting Initial Data (e.g., installation) The value of SGAIN-M/-C/-Y/-K is '255'.
		0443	At Time of Setting Initial Data (e.g., Installation) The value of REFG-K is '255'.
	• Toner density sensor (faulty) • Stirring (developer, inside the developing assembly) The following applies to Bk only: • Stray light (to the sensor assembly; cover absent, front door open)	xx50	At Time of Setting Initial Data (e.g., installation) The gain cannot be set. (No target value exists for 'SGNL' between 'GAIN: 20H' and 'GAIN: E0'.)
		0451	At Time of Setting Initial Data (e.g., installation) The gain cannot be set. (No target value exists for 'REF' between 'GAIN: 20H' and 'GAIN: E0'.)
	• Black toner density sensor window (dirt, scratches), Protection sheet (dirt) • Photosensitive drum (dirt, cleaning failure)	0460	At Time of Multiple Initial Rotation (e.g., at power-on) The window soiling correction value is 75% or below the specified value.
		0470	At Time of Multiple Initial Rotation (e.g., at power-on) The window soiling correction value is 125% or more of the specified value.
	DC controller PCB (backup data error; be sure to clear the RAM, and enter the setting recorded on the Service Label) Initial settings (not made)	xx80	During a copying sequence, the value of M-SGNL, C-SGNL, or Y-SGNL is '777' or less or the value of K-SGNL is '163' or less because of an error in the memory backup data.
		xx81	During a copying sequence, the value of M-RFF, C-REF, or Y-REF (initial settings) is '144' or less or the value of K-REF is '777' or less because of an error in the memory backup data.

Code	Cause	Description	
E020	DC controller PCB (backup data error; be sure to clear the RAM, and enter the setting recorded on the Service Label) Initial settings (not made)	xx82	During a copying sequence, the value of SGAIN-M/-C/-Y/-K is '0' because of an error in the memory backup data.
		0483	During a copying sequence, the value of REFG-K is '0' because of an error in the memory backup data.
		xx90	During a copying sequence, the value of M-SGNL, C-SGNL, or Y-SGNL (initial settings) is '859' or more or the value of K-SGNL is '470' because of an error in the memory backup data.
		xx91	During a copying sequence, the value of M-REF, C-REF, or Y-REF (initial settings) is '920' or more or the value of K-REF is '859' or more because of an error in the memory backup data.
		xx92	The value of SGAIN-M/-C/-Y/-K is '255' because of an error in the memory backup data.
		0493	During a copying sequence, the value of REFG-K is '255' because of an error in the memory backup data.
	• Developer (deterioration) • Developing cylinder (fails to rotate) • Developing assembly (fails to engage) • Toner density sensor (faulty) • developer (inside the developing assembly; stirring fault) • Toner level sensor (faulty) The following applies to Bk only: • Stray light (to the sensor assembly; cover absent, front door open) • Photosensitive drum (deterioration)	xxA0	During a copying sequence, the variation in the values of M-SGNL, C-SGNL, Y-SGNL, and K-SGNL is '102' or more when sampling the data 10 times.
		xxA1	During a copying sequence, the variation in the values of M-REF, C-REF, Y-REF, and K-REF is '102' or more when sampling the data 10 times.
		xxB0	During a copying sequence, the average of the values of M-SGNL, C-SGNL, Y-SGNL is '306' or less or the value of K-SGNL is '102' or less after sampling the data.
		xxB1	During a copying sequence, the value of REF dropped from the initial setting by 30% or more.

Code	Cause	Description	
E020	• Developer (deterioration) • Developing cylinder (fails to rotate) • Developing assembly (fails to engage) • Toner density sensor (faulty) • developer (inside the developing assembly; stirring fault) • Toner level sensor (faulty) The following applies to Bk only: • Stray light (to the sensor assembly; cover absent, front door open) • Photosensitive drum (deterioration)	xxC0	During a copying sequence, the average of the values of SGNL-M, SGNL-C, SGNL-Y is '1013' or more or the value of SGNL-K is '550' or more when sampling the data.
		xxC1	During a copying sequence, the value of REF has risen from the initial setting by 30% or more.
		xxD0	During a copying sequence, the value of SGNL remained -3% or more than the initial setting while 20 copies (Large size) were made continuously.
		xxE0	During a copying sequence, the value of SGNL remained +3% or more than the initial setting while 20 copies (Large size) are made continuously.
		00F0	The hopper motor drive circuit has detected an overcurrent for 0.7 sec or more.
E030	• Counter (open circuit) • DC controller PCB	Make a check immediately before the counter turns on and off; normal if the counter drive signal is '0' when the counter turns on or if the counter drive signal is '1' when the counter turns off.	
E032	• Copy Data Controller-related error	The counter or the like of the Copy Data Controller-A1 does not operate.	
E050	Duplexing Unit • Connector (disconnected) • Sensor (faulty) • Motor (faulty) / Belt (torn) • DC controller PCB (faulty)	A specific fault is detected at the start of two-sided copying.	

Code	Cause	Description	
E061		Potential Control Fault Higher 2 Digits xx=00: MCYBk in common xx=01: M xx=02: C xx=03: Y xx=04: Bk	
	• Potential measuring unit (faulty) • Primary corona assembly (faulty) • HVDC (faulty) • DC controller PCB (faulty) • Laser unit (faulty) • Laser shutter (faulty) • Pre-exposure lamp (faulty) • Environment sensor (faulty) • Photosensitive drum (faulty) • Photosensitive drum (faulty grounding)	xx00	The computed value of V00 for the 1st rotation is below the lower limit (100V).
		xx01	The computed value of V00 for the 1st rotation is above the upper limit (900V).
		xx02	The computed value of VFF for the 1st rotation is below the lower limit (10V).
		xx03	The computed value of VFF for the 1st rotation is above the upper limit (800V).
		xx04	The computed value of the grid bias for the 1st rotation is below the lower limit (200V).
		xx05	The computed value of the grid bias for the 1st rotation is above the upper limit (900V).
		xx06	The computed value of the developing bias for the 1st rotation is below the lower limit (200 v).
		xx07	The computed value of the developing bias for the 1st rotation is above the upper limit (700V).
		xx08	The computed value of the V00 for the 2nd rotation is below the lower limit (100V).

Code	Cause	Description	
E061	• Potential measuring unit (faulty) • Primary corona assembly (faulty) • HVDC (faulty) • DC controller PCB (faulty) • Laser unit (faulty) • Laser shutter (faulty) • Pre-exposure lamp (faulty) • Environment sensor (faulty) • Photosensitive drum (faulty) • Photosensitive drum (faulty grounding)	xx09	The computed value of V00 for the 2nd rotation is above the upper limit (900V).
		xx0A	The computed value of VFF for the 2nd rotation is below the lower limit (10V).
		xx0B	The computed value of VFF for the 2nd rotation is above the upper value (800V).
		xx0C	The computed value of the grid bias for the 2nd rotation is below the lower limit (200V).
		xx0D	The computed value of the grid bias for the 2nd rotation is above the upper limit (900V).
		xx0E	The computed value of the developing bias for the 2nd rotation is below the lower limit (200V).
		xx0F	The computed value of the developing bias for the 2nd rotation is above the upper limit (700V).
		001x: Inadequate primary corona assembly output	
		0010	The photosensitive drum surface potential V is below the lower limit (20V) for the 1st rotation when laser output voltage=V00, grid bias=300V, –500V, and =700V.
		0011	The photosensitive drum surface potential V for the 1st rotation is below the lower limit (20V) when laser output voltage=V00 and grid bias=300V.
		0012	The photosensitive drum surface potential V for the 1st rotation is below the lower limit (20V) when the laser output voltage=V00 and the grid bias=500V.

Code	Cause	Description	
E061	• Potential measuring unit (faulty) • Primary corona assembly (faulty) • HVDC (faulty) • DC controller PCB (faulty) • Laser unit (faulty) • Laser shutter (faulty) • Pre-exposure lamp (faulty) • Environment sensor (faulty) • Photosensitive drum (faulty) • Photosensitive drum (faulty grounding)	0013	The photosensitive drum surface potential V for the 1st rotation is below the lower limit (20V) when the laser output voltage=V00 and the grid bias=300V, =500V, and =700V.
		0018	The photosensitive drum surface potential V for the 1st rotation is below the lower limit (100V) when the laser output voltage=V00 and the grid bias=300V, =500V, and =700V.
		0019	The photosensitive drum surface potential V for the 2nd rotation is below the lower limit (20V) when the laser output voltage=V00 and the grid bias=300V.
		001A	The photosensitive drum surface potential V for the 2nd rotation is below the lower limit (20V) when the laser output voltage=V00 and the grid bias=500V.
		001B	When the photosensitive drum surface potential V for the 2nd rotation is blow the lower limit (20V) when the laser output voltage=V00 and the grid bias=700V.
		002x: Grid bias output fault (primary corona assembly)	
		0020	The photosensitive drum surface potential V for the 1st rotation is below the lower limit (100V) when the laser output voltage=V00 and the grid bias is =300V, =500V, and =700V.

Code	Cause	Description	
E061	• Potential measuring unit (faulty) • Primary corona assembly (faulty) • HVDC (faulty) • DC controller PCB (faulty) • Laser unit (faulty) • Laser shutter (faulty) • Pre-exposure lamp (faulty) • Environment sensor (faulty) • Photosensitive drum (faulty) • Photosensitive drum (faulty grounding)	0021	The photosensitive drum surface potential V for the 1st rotation is below the lower limit (100V) when the laser output voltage=V100 and the grid bias =300V.
		0022	The photosensitive drum surface potential V for the 1st rotation is below the lower limit (100V) when the laser output voltage=100 and the grid bias=500V.
		0023	The photosensitive drum surface potential V for the 1st rotation is below the lower limit (100V) when the laser output voltage=V00 and the grid bias=700V.
		0028	The photosensitive drum surface potential V for the 2nd rotation is below the lower limit (100V) when the laser output voltage=V00 and the grid bias=300V, =500V, and =700V.
		0029	The photosensitive drum surface potential V for the 2nd rotation is below the lower limit (100V) when the laser output voltage=V00 and the grid bias=300V.
		002A	The photosensitive drum surface potential V for the 2nd rotation is below the lower limit (100V) when the laser output voltage=V00 and the grid bias=500V.
		002B	The photosensitive drum surface potential V for the 2nd rotation is below the lower limit (100V) when the laser output voltage=V00 and the grid bias=700V.
		003x: primary corona assembly grid wire broken	

Code	Cause	Description	
E061	• Potential measuring unit (faulty) • Primary corona assembly (faulty) • HVDC (faulty) • DC controller PCB (faulty) • Laser unit (faulty) • Laser shutter (faulty) • Pre-exposure lamp (faulty) • Environment sensor (faulty) • Photosensitive drum (faulty) • Photosensitive drum (faulty grounding)	0030	The photosensitive drum surface potential V for the 1st rotation is above the upper limit (900V) when the laser output voltage=V00 and the grid bias=300V, =500V, and =700V.
		0031	The photosensitive drum surface potential V for the 1st rotation is above the upper limit (900V) when the laser output voltage=V00 and the grid bias =300V.
		0032	The photosensitive drum surface potential V for the 1st rotation is above the upper value (900 V) when the laser output voltage=V00 and the grid bias=500V.
		0033	The photosensitive drum surface potential V for the 1st rotation is above the upper limit (900V) when the laser output voltage=V00 and the grid bias=700V.
		0038	The photosensitive drum surface potential V for the 2nd rotation is above the upper limit (900V) when the laser output voltage=V00 and the grid bias=300V, =500V, and =700V.
		0039	The photosensitive drum surface potential V for the 2nd rotation is above the upper limit (900V) when the laser output voltage=V00 and the grid bias=300V.
		003A	The photosensitive drum surface potential V for the 2nd rotation is above the upper limit (900V) when the laser output voltage=V00 and the grid bias=500V.
		003B	The photosensitive drum surface potential V for the 2nd rotation is above the upper limit (900V) when the laser output voltage=V00 and the grid bias=700V.

Code	Cause	Description	
E061	• Potential measuring unit (faulty) • Primary corona assembly (faulty) • HVDC (faulty) • DC controller PCB (faulty) • Laser unit (faulty) • Laser shutter (faulty) • Pre-exposure lamp (faulty) • Environment sensor (faulty) • Photosensitive drum (faulty) • Photosensitive drum (faulty grounding)	004x: primary corona grid wire, primary corona wire, and pre-exposure lamp faulty; connector poor contact	
		0040	For the 1st rotation with the laser output voltage=V00, the difference between the photosensitive drum surface potential V when the grid bias=300V and the photosensitive surface potential V when the grid bias=500V is below the lower limit (50V).
		0041	For the 1st rotation with the laser output voltage=V00, the difference between the photosensitive drum surface potential V when the grid bias=500V and the photosensitive surface potential V when the grid bias=700V is below the lower limit (50V).
		0048	For the 2nd rotation with the laser output voltage=V00, the difference between the photosensitive drum surface potential V when the grid bias=300V and the photosensitive surface potential V when the grid bias=500V is below the lower limit (50V).
		0049	For the 2nd rotation with the laser output voltage=V00, the difference between the photosensitive drum surface potential V when the grid bias=500V and the photosensitive surface potential V when the grid bias=700V is below the lower limit (50V).
		005x: inadequate laser intensity, laser unit fault, laser controller PCB faulty	
		0050	For the 1st rotation, the difference in the photosensitive drum surface potential V is below the lower limit (100V) when the grid bias=300V, =500V, and =700V with the laser output voltage=V00 and =VFF.

Code	Cause	Description	
E061	• Potential measuring unit (faulty) • Primary corona assembly (faulty) • HVDC (faulty) • DC controller PCB (faulty) • Laser unit (faulty) • Laser shutter (faulty) • Pre-exposure lamp (faulty) • Environment sensor (faulty) • Photosensitive drum (faulty) • Photosensitive drum (faulty grounding)	0051	For the 1st rotation, the difference in the photosensitive drum surface potential V is below the lower limit (50V) when the grid bias=300V with the laser output voltage=V00 and =VFF.
		0052	For the 1st rotation, the difference in the photosensitive surface potential V is below the lower limit (80V) when the grid bias=500V with the laser output voltage=V00 and =VFF.
		0053	For the 1st rotation, the difference in the photosensitive drum surface potential V is below the lower limit (100V) when the grid bias=700V with the laser output voltage=V00 and =VFF.
		0058	For the 2nd rotation, the difference in the photosensitive drum surface potential V is below the lower limit (100V) when the grid bias=300V, =500V, and =700V with the laser output voltage=V00 and =VFF.
		0059	For the 2nd rotation, the difference in the photosensitive drum surface potential V is below the lower limit (50V) when the grid bias=300V with the laser output voltage=V00 and =VFF.
		005A	For the 2nd rotation, the difference in the photosensitive surface potential V is below the lower limit (80V) when the grid bias=500V with the laser output voltage=V00 and =VFF.
		005B	For the 2nd rotation, the difference in the photosensitive drum surface potential V is below the lower limit (100V) when the grid bias=700V with the laser output voltage=V00 and =VFF.
		006x: Potential sensor faulty or potential sensor not adjusted	
		0060	The potential offset value is below the specified value (80V).
		0061	The potential offset value is above the specified value (120V)

Code	Cause	Description	
E071	• Side A sensor (PS2; faulty) • Side B sensor (PS3; faulty) • Drum motor drive system (overload) • DC controller PCB (faulty) • Transfer drum (faulty engagement)	0001	No change is detected within 10 sec after the side A image leading edge signal (ITOP-A) has engaged the transfer drum.
		0002	No change is detected within 10 sec after the side B image leading edge signal (ITOP-B) has engaged the transfer drum.
		0003	The period from the side A image leading edge signal (ITOP-A) to the side A image leading edge signal (ITOP-A) is shorter by 0.3 sec (or more) than the specified value (transfer drum rotation = 4.25 sec).
		0004	The period from the side A image leading edge signal (ITOP-A) to the side B image leading edge signal (ITOP-B) is shorter by 0.3 sec (or more) than he specified value (transfer drum 0.5 rotation = 2.125 sec).
		0005	The period from the side B image leading edge signal (ITOP-B) to the side B image leading edge signal (ITOP-B) is shorter by 0.3 sec (or more) than the specified value (transfer drum rotation = 4.25 sec).
		0006	The period from the side A image leading edge signal (ITOP-A) to the side B image leading edge signal (ITOP-B) is shorter by 0.3 sec (or more) than the specified value (transfer drum 0.5 rotation = 2.125 sec).
E072	• Transfer drum cleaner drive system (overload) • Transfer drum cleaner motor (M10; faulty) • DC controller PCB (faulty)	0101	The transfer drum cleaner motor drive circuit on the DC controller PCB has detected an overcurrent for 0.1 sec or more.
	• Brush drive motor (M11; faulty) • DC controller PCB (faulty)	0201	The brush drive motor drive circuit on the DC controller PCB has detected an overcurrent for 0.1 sec or more.

Code	Cause	Description	
E072	• Brush drive motor home position sensor (PS7; faulty) • Brush drive motor (M11; faulty) • DC controller PCB (faulty)	0202	• The brush drive motor home positions signal (BMTRHP) is not generated within 4 sec after the brush drive motor drive signal has been generated.
E073	• Transfer drawer connector (faulty) • DC controller PCB (faulty)	0001	The connect signal CONNECT for the transfer assembly frame drawer has gone '0'.
		0002	The connect signal CONNECT for the transfer drawer connector has gone '0'.
E100	• Laser unit (faulty) • Laser driver PCB (faulty) • Image processor PCB (faulty)	The BD signal cannot be detected for 1 sec or more when potential control is started.	
E110	• Laser scanner drive system (overload) • Laser scanner motor (M3; faulty) • DC controller PCB (faulty)	The laser scanner motor ready signal (LSMRDY*) is '1' for 0.5 sec or more while the laser scanner motor is rotating.	
E190	The laser scanner motor ready signal (LSMRDY*) is '1' for 0.1 sec or more while the laser scanner motor is rotating.	cccc	Normal
		xxxx	The RAM access to the laser controller PCB when the power switch is turned on is not normal (80xxxxH).
E208	• DC power supply (to the scanner motor driver PCB; faulty) • Wiring, connector (faulty) • Scanner motor driver PCB (faulty) • Reader controller PCB (faulty)	The communication between the scanner motor driver PCB and the reader controller PCB has remained off for 5 sec or more.	

Code	Cause	Description
E220	Scanning lamp (error) • Lamp regulator PCB (faulty)	• During standby, the scanning lamp has turned on even though the reader controller PCB has turned off the scanning lamp on signal. • During copying, the scanning lamp has turned off even though the DC controller PCB has turned on the scanning lamp on signal.
E305	• IP-MAIN PCB (faulty) • IP-PRJ PCB (faulty) • EP-eD PCB (faulty) For details, see Table 3-1104.	• RAM access failed on the IP-MAIN PCB at power-on. • RAM access on the IP-PRJ PCB or the IP-ED PCB has failed. (E305 is indicated at the start of copying in projector or area designation mode.)
E350	• Bar code (faulty, not attached) • Image processor PCB (faulty)	When the copier checked the presence/absence of a bar code label on the standard white plate before making the first copy after power-on, it has failed to detect the bar code.
E351	• IP-MAIN PCB (faulty) • IP-ECO PCB (faulty) • IP-MAIN, IP-ECO, laser driver (contact fault)	• The IP-ECOPC and the IP-MAIN PCB are not connected. • The IP-ECO PCB and the ROM are not compatible.
E352	• Bar code label (faulty or absent)	• The bar code on the standard white plate cannot be read when 'WSMP' is executed in service mode.
E620	• IP-ED PCB (faulty) • IP-MAIN PCB (faulty)	The communication between the IP-ED PCB and the IP-MAIN PCB has remained off for 5 sec or more.
E633 (TYPE1)	• IP-PRJ PCB (faulty) • IP-MAIN PCB (faulty) • Film projector controller PCB (faulty)	The communication between the film projector and the IP-MAIN PCB has remained off for 5 sec or more.
E718 (TYPE2)		
E634	• Film projector lamp (faulty)	See the Service Manual for the film projector.

Code	Cause	Description
E700	• DC controller PCB (faulty) • Reader controller PCB (faulty) • Power supply PCB (faulty)	The communication between the DC controller PCB and the reader controller PCB has remained for 5 sec or more.
E717	• Copy Data Controller A1-related error	The Copy Data Controller has been physically disconnected.
E800	• Power switch • DC controller PCB • DC harness	A break in the auto shutoff signal has been detected.
E804	• Power supply unit cooling fan (FM8) Error	The power unit cooling fan (FM8) has stopped to rotate.

E305 in Detail

Detail code	Description	Detail code	Description
0001	BD error (same as E100)	0100	IP-ED PCB RAM error or not connected
0002	Density conversion RAM error		
0004	B shading correction RAM error	0400	IP-PRJ PCB error or not connected
0008	G shading correction RAM error	0800 1000	IP-IF PCB RAM error
0010	R shading correction RAM error		
0020	Color correction RAM error		
0040	Scanning motor error		

Table 3-1104

Reference:

1. To reset the machine after self diagnosis, turn off the machine once.
   This, however, will not work for errors represented by 'E000'. This is to prevent damage to the fixing roller that would occur if the user were allowed to reset E000 errors without correcting the cause (thermistor, for example).
2. If 'E005" is noted indicating that the cleaning belt has been used up, replace the belt and execute 'E005-RLS' of 'FUSER' under 'FUNCT'.
3. You can check the data for the most recent E-indication after resetting the machine by turning it off using 'JAM/ERROR' under 'DISPLAY' of service mode.

Clearing E000

1) Activate service mode, and select 'FUSER' under 'FUNC'.
2) Press 'E000-RLS'.
3) Turn off and then on the power switch.

Clearing E005

1) Replace the cleaning belt.
2) Activate service mode, and select 'FUSER' under 'FUNC'.
3) Press 'E005-RLS'.
4) Turn off and then on the power switch.

Clearing E008

1) Supply fixing oil to the fixing oil case.
2) Turn off and then on the power switch.
   - Oil will be supplied automatically without clearing the 'E008'; the operation will end in about 10~15 min.
3) Turn off and then on the power switch.

Clearing E717

1) Activate service mode, and press 'B-CLR' of 'DATA-CON' under 'OPTION'. Or, clear the RAM on the reader controller PCB.

Self Diagnosis in RDFs

The microprocessor on the RF controller PCB is provided with a mechanism which automatically checks the state of the machine (sensors, in particular). When it identifies an error, it indicates the nature of the error on the copier's control panel in the form of a code.

Code	Main Cause	Description
E400	• Data communication (with copier)	• The communication is monitored at all times, and an error is identified when there is an interruption of 5 sec or more.
E401	• Pick-up motor (M1; faulty) • Pick-up roller home position sensor 1 (S8; faulty)	• The state of the sensor does not change when the pick-up motor has been driven for 2 sec or more.
E402	• Belt motor (M3; faulty) • Belt motor clock sensor (S11; faulty)	• The number of belt motor clock pulses is below a specific value for 100 ms.
E403	• Reversing motor (M2; faulty) • Slip sensor (S10; faulty)	• The number of slip clock pulses is below a specific value for 100 ms.
E404	• Delivery motor (M5; faulty) • Delivery motor clock sensor (S12; faulty)	• The number of delivery motor clock pulses is below a specific value for 200 ms.
E405	• Pick-up motor (M1; faulty) • Pick-up motor clock sensor (S9; faulty)	• The number of pick-up motor clock pulses is below a specific value for 200 ms.
E407	• Tray up/down motor (M6; faulty) • Tray position sensor (S25; faulty)	• The state of the sensor does not change when the tray up/down motor has been driven for 2 sec or more.
E408	• Feeding motor (M8; faulty) • Feeding motor clock sensor (S22; faulty)	• The number of feeding motor clock pulses is below a specific vaue for 100 ms.
E411	• Registration sensor 1 (S3; faulty) • Skew sensor 1 (S4; faulty) • Manual registration sensor (S19; faulty) • Image leading edge sensor (S20; faulty) • Original sensor 1 (S1; faulty)	• The output of each sensor is more than a specific value in the absence of paper.

Note:

1. When the self diagnosis mechanism has been activated, you may reset it by turning off the copier's power switch.
2. You may continue to make copies while the RF is out of order by opening the RF and placing the original on the copyboard glass.

Self Diagnosis in Sorters

Code	Error	Description
E510 (10H)	• The feeding motor (M1) fails to rotate.	• The clock signal from the clock sensor (PI5) of the feeder motor is absent for 250 ms or more.
E516 (16H)	• The low-speed feeding motor (M10) fails to rotate.	• The clock sensor (PI23) of the low-speed feeding motor does not generate clock signals for 250 ms or more.
E517 (17H)	• The pressure cam of the buffer pass unit does not detect home position.	• The home position is not detected within a specific period of time* after a press on the Copy Start key. *Varies depending on the copier.
E522 (22H)	• The push bar motor (M7) fails to rotate.	• The operation does not end within 2000 ms after the motor drive signal has been generated.
E523 (23H)	• The reference wall motor (M6) fails to rotate.	• The operation does not end within 2000 ms after the motor drive signal has been generated.
E524 (24H)	• The multiple guide motor (M5) fails to rotate.	• The operation does not end within 2000 ms after the motor drive signal has been generated.
E525 (25H)	• The automatic adjustment mechanism for the bin inside paper sensor 1 (S3, S4) has failed.	• The bin inside paper sensor 1 (S3, S4) cannot be adjusted automatically or an error exists in the automatic adjustment value.
E526 (26H)	• The automatic adjustment mechanism for the bin inside paper sensor 2 (S6, S7) has failed.	• The bin inside paper sensor 2 (S6, S7) cannot be adjusted automatically or an error exists in the automatic adjustment value.
E530 (30H)	• The guide bar motor (M8) fails to rotate.	• The operation does not end within a specific period of time after the motor drive signal has been generated. time: 5000 ms for front retrieval mode 2000 ms in other mode

Code	Error	Description
E531 (31H)	• The stapler unit swing motor (M4) fails to rotate.	• The operation does not end within 2000 ms after the motor drive signal has been generated. • The clock signal from the clock sensor (PI8) of the motor is absent for 250 ms or more. • The input signal from the swing home position sensor (PI9) does not change for 1000 ms or more.
E532 (32H)	• The stapler unit drive motor (M3) fails to rotate.	• The operation does not end within 5000 ms after the motor drive signal has been generated.
E533 (33H)	• The automatic adjustment mechanism for the stapler inside paper sensor has failed.	• The stapler inside paper sensor cannot be adjusted automatically or an error exists in the automatic adjustment value.
E540 (40H)	• The bin drive motor (M9) fails to rotate.	• The operation does not end within a specific period of time after the motor drive signal has been generated. time: 20000 ms for initialization 2000 ms for others • The clock signal from the clock plate sensor of the motor is absent for 250 ms or more. • The input signal from the lead cam position sensor (PI20) does not change for 2000 ms.
E550 (50H)	• The DC output from the sorter controller PCB is faulty.	• An error has occured in the DC output (24VL, 24VP) of the sorter controller PCB.

I. EXTERNALS

A. Covers

1. External Covers

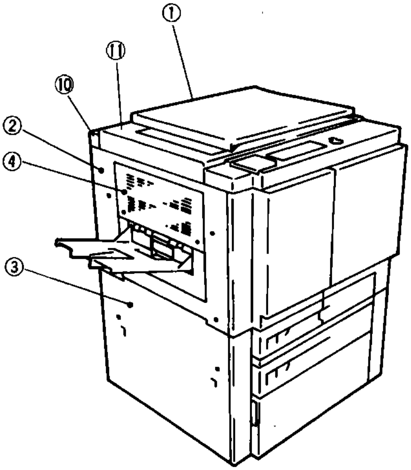


Figure 4-101 (a) (CLC700)

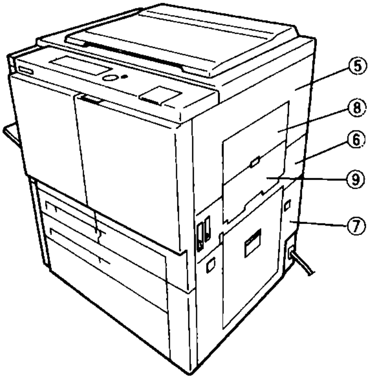


Figure 4-101 (b)

① Rear cover (5)
② Upper left cover (4)
③ Lower left cover (2)
④ Delivery upper cover (20)
⑤ Upper right cover (2)
⑥ Middle right cover (2)
⑦ Lower right cover (2)
⑧ Reader controller cover (2)
⑨ Multifeeder cover (2)
⑩ Upper rear cover (3)
⑪ Upper cover (11)

Reference:

The number in parentheses indicates the number of mounting screws used for the cover; note that the screw used to install the rear cover is equipped with a washer.

Remove the covers as necessary to clean, inspect, or repair the inside of the machine.

Those that can be removed by mere removal of the screws are omitted from the instructions.

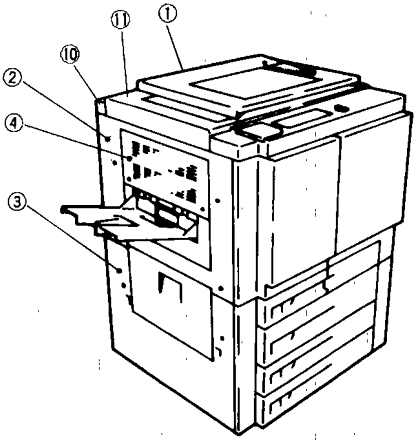


Figure 4-102 (a) (CLC800)

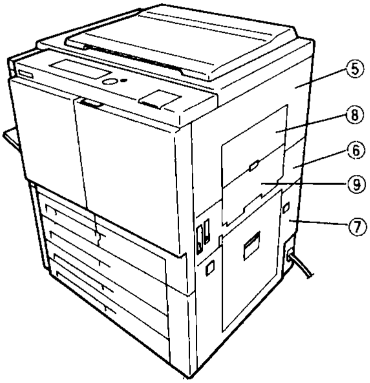


Figure 4-102 (b)

① Rear cover (5)
② Upper left cover (4)
③ Lower left cover (2)
④ Delivery upper cover (2)
⑤ Upper right cover (2)
⑥ Center right cover (2)
⑦ Lower right cover (2)
⑧ Reader controller cover
⑨ Multifeeder cover (2)
⑩ Upper rear cover (3)
⑪ Upper cover (11)

Reference:

The number in parentheses indicates the number of mounting screws used for the cover; note that the screw used to install the rear cover is equipped with a washer.

Remove the covers as necessary to clean, inspect, or repair the inside of the machine.

Those that can be removed by mere removal of the screws are omitted from the instructions.

2. Inside Left Cover

1) Remove the four screws ①.

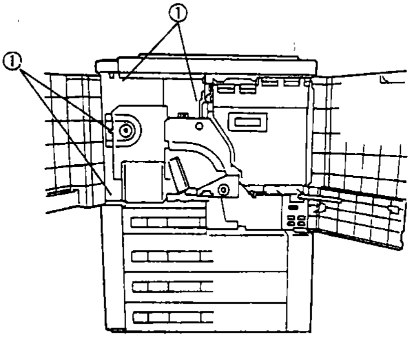


Figure 4-103

2) Slide out the transfer assembly frame, and remove the inside left cover.

3. Transfer Assembly Frame Cover

1) Remove the transfer drum rotating knob ①.
2) Remove the two screws ②, and remove the transfer frame cover ③.

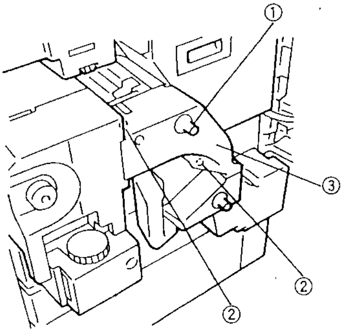


Figure 4-104

4. Fixing Assembly Cover

1) Remove the screw, and remove the fixing assembly knob ①.
2) Remove the two screws ②, and remove the fixing cover ③.

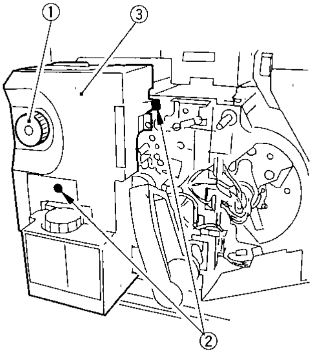


Figure 4-105

Caution:
Make sure that the hook at the bottom of the cover is properly fitted into the hole in the transfer assembly frame when attaching the fixing cover.

5. Transfer Assembly Frame Right Cover

1) Pull out the registration roller rotating knob.
2) Remove the two screws ①, and remove the transfer frame right cover ②.

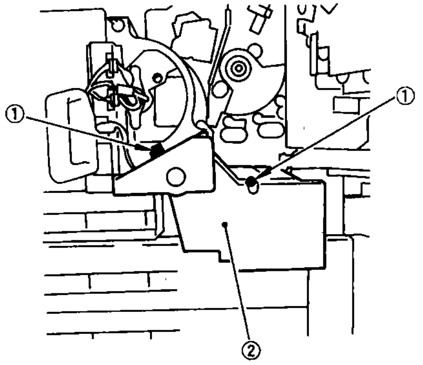


Figure 4-106

> **Caution:**
> Make sure that the hook at the bottom of the cover is properly fitted into the hole in the transfer frame when attaching the transfer assembly frame right cover.

6. Detaching the Copyboard Glass

1) Remove the two screws, and remove the copyboard glass (right).
2) Remove the copyboard glass by lifting its right end.

Reference:
Do not remove parts other than the copyboard glass retainer (right) when detaching the copyboard glass. When attaching it, take care so that it will not override the stop plate at the rear and front; butt it against the left rear when fixing it in place.

7. Detaching the Upper Cover

1) Remove the control panel.
2) Remove the copyboard glass.
3) Remove the three screws ① from the bottom of the control panel. (See Figure 4-108.)
4) Remove the three screws, and remove the rear upper cover.
5) Remove the two screws, and remove the vertical size plate.
6) Remove the face plates ② covering the projector screw holes using a flat-blade screwdriver.

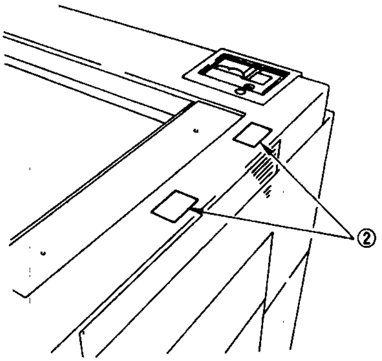


Figure 4-107

7) Remove the eight screws ③, and remove the upper cover ④.

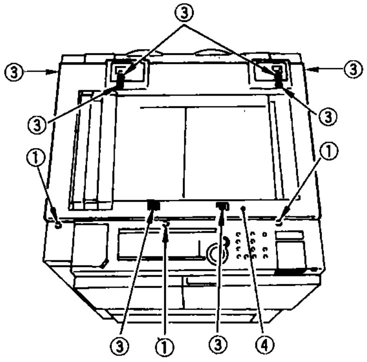


Figure 4-108

B. Control Panel

1. Detaching the Control Panel

1) Remove the four screws ①, and remove the control panel ②.

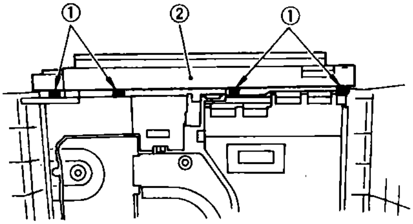


Figure 4-109

2. Detaching the Relay PCB

1) Remove the control panel, and turn it over.
2) Remove the harness (J5301) from the copier.
3) Disconnect the six connectors ① of the relay PCB (J5303, J5304, J5305, J5308, J5309, J5310).
4) Remove the five screws ②, and remove the extension control panel PCB, relay PCB, and grounding connecting plate ③.

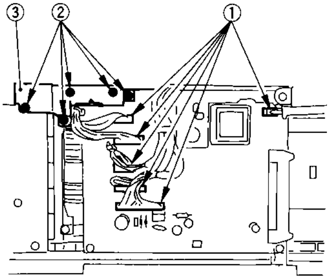


Figure 4-110

5) Remove the three fixing screws of the relay PCB.
6) Turn over the relay PCB.
7) Shift the fixing of the connector ④ of the flexible cable.
8) Pull out the flexible cable ⑤ carefully. (J5302, J5306).

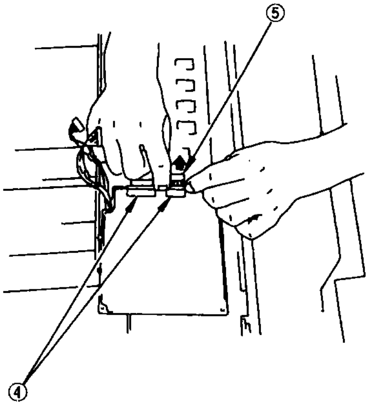


Figure 4-111

3. Detaching the LCD PCB

1) Remove the relay PCB.
2) Remove the five screws ①, and remove the LCD PCB ②, keypad PCB ③, and grounding connecting plate ④.

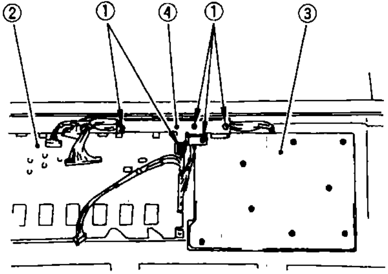


Figure 4-112

3) Remove the three screws, and remove the LCD PCB.

4. Detaching the Extension Control Panel PCB

1) Remove the relay PCB.
2) Remove the five screws ①, and remove the extension control panel PCB ②.

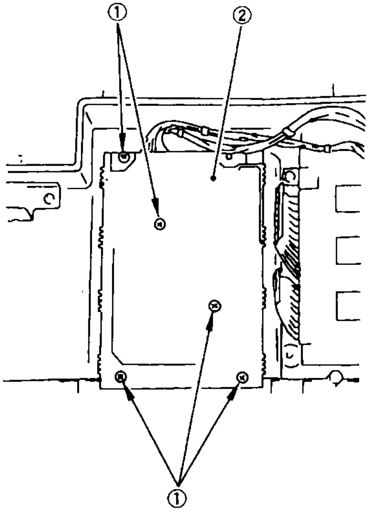


Figure 4-113

5. Detaching the Keypad PCB

1) Remove the relay PCB.
2) Remove the five screws ①, and remove the LCD PCB ②, keypad PCB ③, and grounding connecting plate ④.

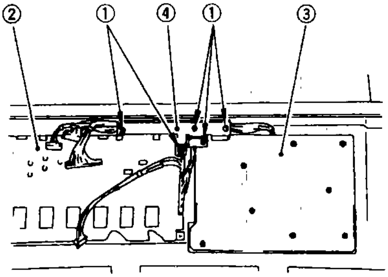


Figure 4-114

3) Remove the nine screws ⑤, and remove the keypad PCB ⑥.

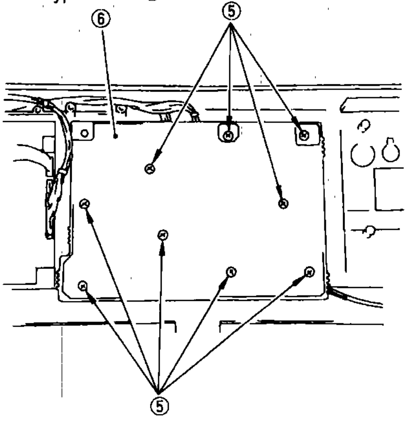


Figure 4-115

4) Remove the connecting harness connecting to the pilot lamp. (J5003)

C. Flywheel

1. Detaching the Flywheel

Caution:

The copier's three flywheels ① weigh 30 kg in total, each weighing 10 kg.
Take adequate care not to drop them; support them as shown in Figure 4-116.

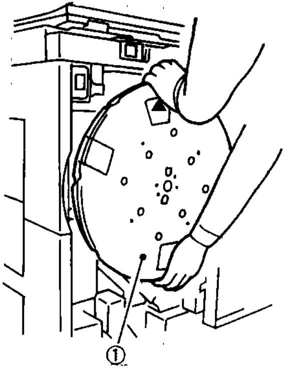


Figure 4-116

1) Remove the rear cover.
2) Remove the two screws ①, and remove the flywheel 1 ②.

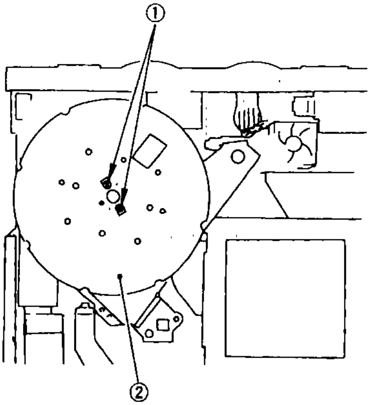


Figure 4-117

3) Remove the two screws, and remove the flywheel 2.
4) Remove the two screws ③, and remove the flywheel 3 ④.

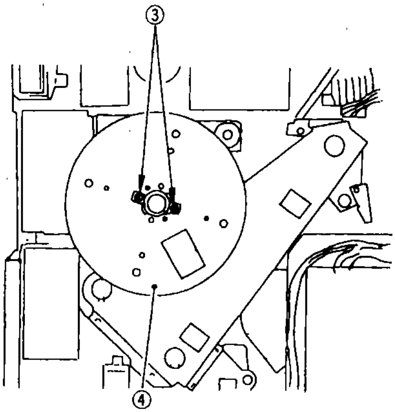


Figure 4-118

2. Points to Note When Attaching the Flywheel

- The flywheels 1, 2, and 3 have their own orientation; pay attention to their face and back, and install them so that the 10 kg label is in view.
- Put the flywheels 2 and 1 together so that the cut-outs will be positioned over mounting screws.

D. Fans

1. Outline

The copier is equipped with 14 fan motors to drive the fans, thereby circulating the air inside the machine and preventing overheating; the information that follows is limited to the major fans.

2. Primary Corona Assembly Fan (FM2)

The primary corona assembly fan unit q consists of two fans (large. small), and air filters.

a. Detaching the Air Filter

1) Remove the rear cover.
2) Remove the flywheels 1 and 2.
3) Remove the fan cover ①; then, remove the air filter ②.

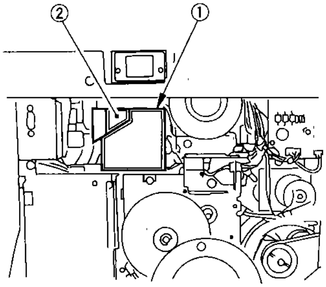


Figure 4-119

Caution:
You may remove the fan cover while lifting the top (see arrow) to facilitate the work.

b. Detaching the Primary Corona Assembly Fan (large; ③)

1) Remove the air filter.
2) Remove the upper rear cover.
3) Remove the three screws ④, and disconnect the connector ⑤; then, pull out the fan.

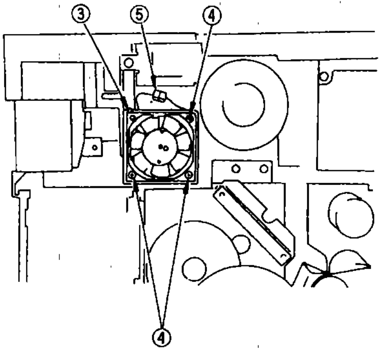


Figure 4-120

c. Detaching the Primary Corona Assembly (small; ⑥)

1) Remove the primary corona assembly fan (large).
2) Remove the four screws ⑦, and disconnect the connector ⑧; remove the fan together with its duct.

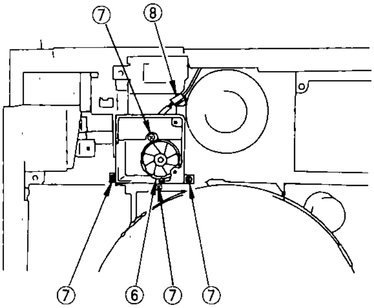


Figure 4-121

3) Remove the two screws, and remove the primary charging assembly fan (small) from the duct.

d. Points to Note When Attaching the Primary Corona Assembly Fan (large)

Caution:
Be sure to install the primary corona assembly fan (large) carefully orienting it for the direction of air; pay attention to the markings on the fan housing.

3. Fixing Assembly Heat Exhaust Fan (FM3)

a. Detaching the Fixing Assembly Heat Exhaust Fan ①

1) Remove the rear cover.
2) Remove the ozone filter.
3) Remove the two screws ②, and disconnect the connector ③; then, pull out the fan from the duct.

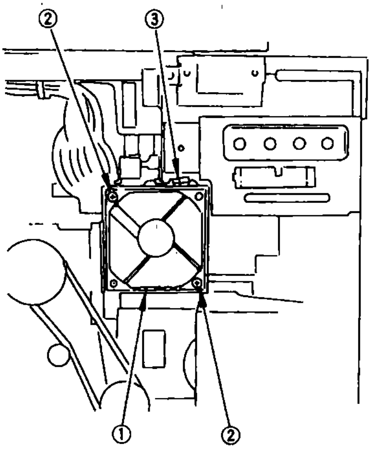


Figure 4-122

b. Points to Note When Attaching the Fixing Assembly Heat Exhaust Fan

Caution:
Be sure to install the fixing assembly heat exhaust fan carefully orienting it for the direction of air; pay attention to the markings on the fan housing.

4. Ozone Exhaust Fan 1 (FM4)

a. Detaching the Ozone Filter

1) Remove the rear cover.
2) Remove the ozone filter ①.

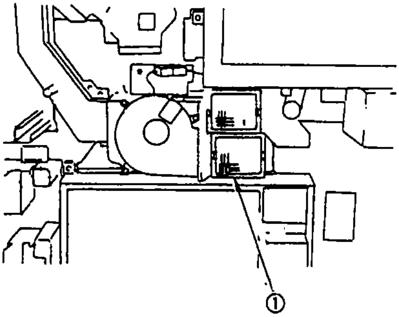


Figure 4-123

b. Detaching the Ozone Exhaust Fan 1

1) Remove the rear cover.
2) Remove the three screws ②, and disconnect the connector ③; then, remove the ozone exhaust fan ④.

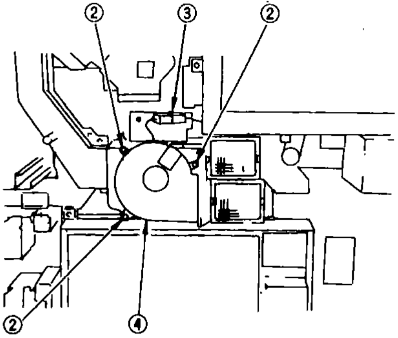


Figure 4-124

c. Detaching the Air Filter of the Ozone Exhaust Fan 1

1) Remove the rear cover.
2) Remove the ozone exhaust fan 1.
3) Remove the air filter ⑤.

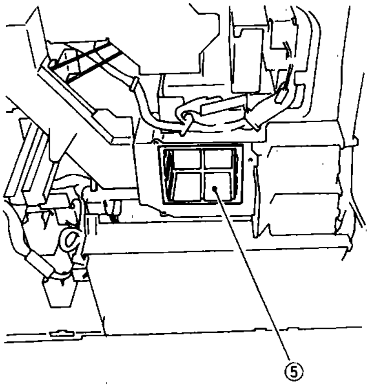


Figure 4-125

5. Ozone Exhaust Fan 2 (FM13)

a. Detaching the Ozone Filter

1) Remove the rear cover.
2) Remove the ozone filter ①.

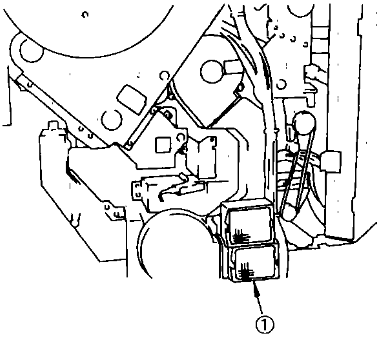


Figure 4-126

b. Detaching the Ozone Exhaust Fan 2

1) Remove the rear cover.
2) Remove the screw, and open the DC controller PCB.
3) Remove the three screws ②, and disconnect the connector ③; then, shift the ozone exhaust fan ④ to remove.

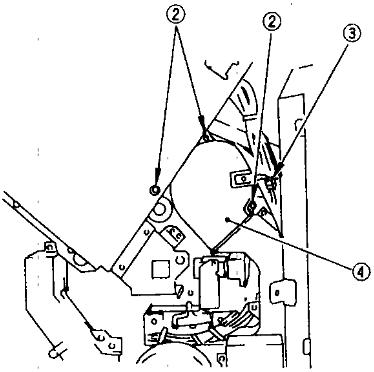


Figure 4-127

c. Detaching the Air Filter of the Ozone Exhaust Fan

1) Remove the rear cover.
2) Remove the ozone exhaust fan.
3) Remove the air filter ⑤.

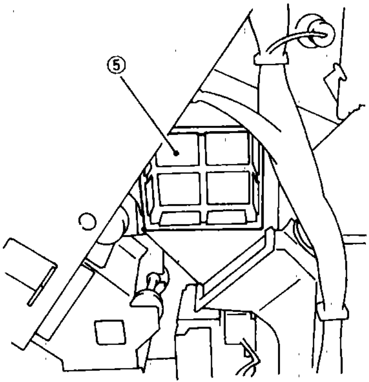


Figure 4-127-1

6. Electrical Unit Fan (FM10)

a. Detaching the Electrical Unit Fan (FM10)

1) Remove the reader controller cover.
2) Remove the upper right cover.
3) Remove the three screws ①, and remove the electrical unit fan mount ②.

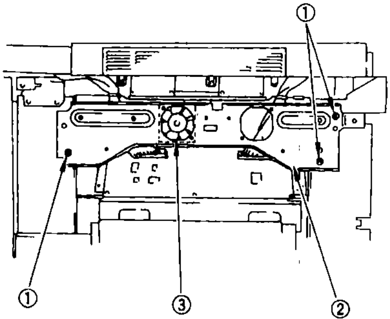


Figure 4-128

4) Remove the two screws, and disconnect the connector; then, remove the electrical unit fan ③.

b. Points to Note When Attaching the Electrical Unit Fan

Caution:
Be sure to install the electrical unit fan carefully orienting it for the direction of air; pay attention to the markings on the fan housing.

7. Scanner Cooling Fan 1/2 (FM1/FM5)

a. Removing the Original Illumination System Cooling Fan 1/2

1) Remove the reader controller cover.
2) Remove the upper right cover.
3) Remove the two screws ①, and remove the scanner cooling fan cover ②.

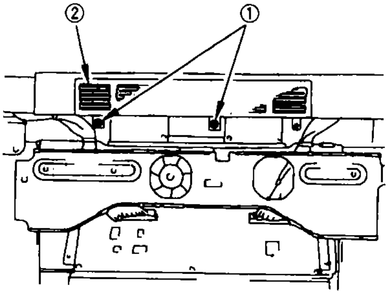


Figure 4-129

4) Remove the two screws (each) from the fan, and disconnect the connector; then, remove the fan.

b. Removing the Air Filter

1) Remove the two screws and disconnect the connector from each fan, and remove the fans.
2) Remove the air filter.

c. Points to Note When Attaching the Scanner Cooling Fan 1/2

Caution:
Be sure to install the scanner cooling fan carefully orienting it for the direction of air; pay attention to the markings on the fan housing.

8. Scanner Cooling Fan 3/4 (FM6/7)

a. Removing the Scanner Cooling Fan 3/4

1) Remove the upper left cover.
2) Remove the two screws ①, and remove the scanner cooling fan cover ②.

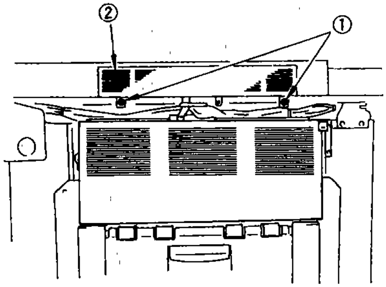


Figure 4-130

3) Remove the screw, and remove the interface harness retainer. (This step applies only when the IP-ED or IP-IF PCB is installed.)
4) Remove the two screws and disconnect the connector from each fan, and remove the fans.

b. Detaching the Scanner Cooling Fan 3/4

Caution:
Be sure to install the scanner cooling fan carefully orienting it for the direction of air; pay attention to the markings on the fan housing.

9. IP Cooling Fan (FM9)

a. Detaching the IP Cooling Fan

1) Remove the inside left cover.
2) Remove the three screws ① and disconnect the connector; then, remove the IP cooling fan cover ②.

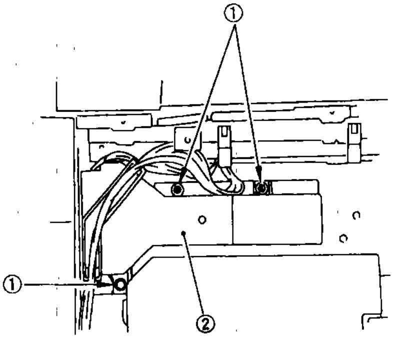


Figure 4-131

3) Remove the two screws, and remove the IP cooling fan.

b. Points to Note when Attaching the IP Cooling Fan

Caution:
Be sure to install the IP cooling fan carefully orienting it for the direction of air; pay attention to the markings on the fan housing.

10. Feeding Fan 1/2 (FM14/15)

a. Detaching the Feeding Fan

1) Open the front door, and pull out the transfer assembly frame.
2) Put down the fixing assembly from the transfer assembly frame.
3) Put down the transfer drum unit from the transfer frame.
4) Put down the transfer assembly frame from the copier.
5) Remove the two screws ①, and disconnect the connector ②; then, remove the feeding fan ③.

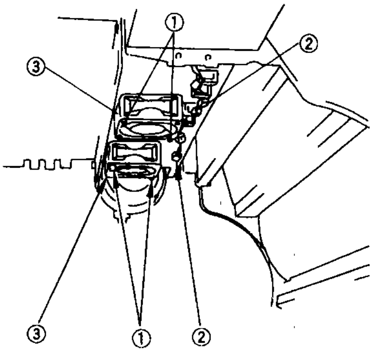


Figure 4-132

b. Points to Note When Attaching the Feeding Fan

Caution:
Be sure to install the feeding fan carefully orienting it for the direction of air, i.e., flowing from above to below; pay attention to the markings on the fan housing.

11. HVT PCB Cooling Fan (FM12)

a. Detaching the Developing Bias Power Supply PCB Cooling Fan

1) Remove the rear cover.
2) Disconnect the seven high-voltage connectors ① from the HVT PCB.
3) Disconnect the four connectors ② (J1, J2, J3/J5); then, remove the screw to remove the grounding wire.
4) Remove the three screws ③; then, remove the HVT PCB ④, and position it toward the front.

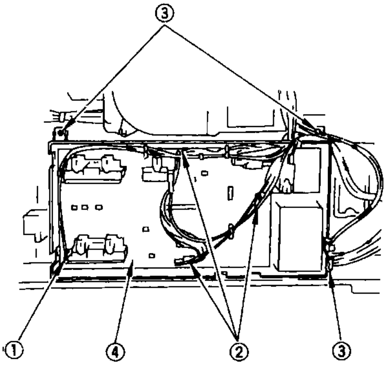


Figure 4-133

5) Disconnect the connector ⑤, and remove the screw ⑥; then, remove the fan ⑦ together with its mount.

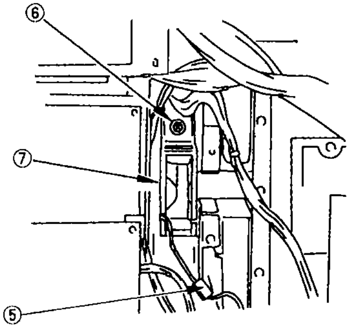


Figure 4-134

b. Points to Note When Attaching the Developing Bias Power Supply PCB

Caution:
Be sure to orient the power supply cooling fan so that it draws air from the direction of the power supply PCB; pay attention to the markings on the fan housing.

12. Power Supply Cooling Fan (FM8)

a. Detaching the Power Supply Cooling Fan

1) Remove the lower left cover.
2) Remove the two screws ①, and disconnect the connector ②; then, pull out the power supply unit.

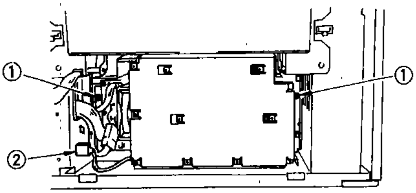


Figure 4-135

3) Disconnect the eight connectors (J22, J24, J23, J27, J28, J25, J26, J29), and disconnect the relay connector.
4) Disconnect the connector, and remove the two screws; then, remove the power supply cooling fan.

b. Points to Note When Attaching the Power Supply Cooling Fan

Caution:
Be sure to install the power supply cooling fan carefully orienting it for the direction of air, i.e., toward the power supply PCB; pay attention to the markings on the fan housing.

II. DRIVE SYSTEM

A. Drive System Belt Layout

- The copier's drive belts are arranged as follows:

① Belt for developing assembly, registration assembly, and photosensitive drum cleaner
② Belt for feeding assembly and delivery/feeding assembly
③ Belt for pick-up assembly
④ Belt for duplexing unit feeding assembly

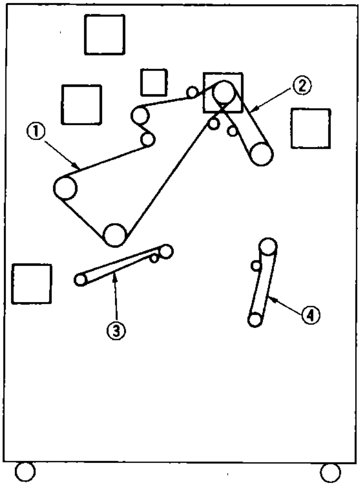


Figure 4-201

B. Drum Motor Assembly

1. Detaching the Drum Motor (M2)

1) Remove the rear cover.
2) Remove the flywheels.
3) Remove the screw, and open the PCB.
4) Remove the seven screws ①, and remove the drive assembly reinforcing plate.

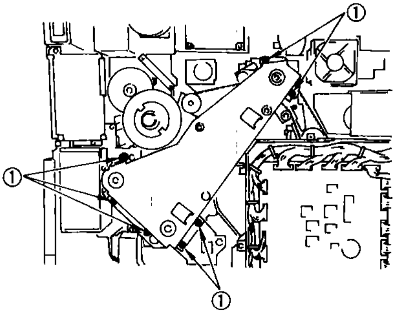


Figure 4-202

5) Remove the two screws ②, and disconnect the three connectors ③; then, remove the lamp regulator PCB ④.

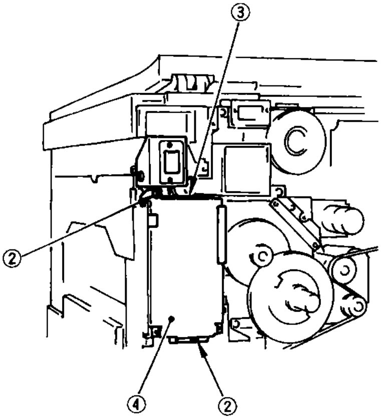


Figure 4-203

6) Remove the sensor flag, remove the screw ⑤, and remove the two hex screws ⑥; then, remove the gear ⑦ installed to the drum shaft.

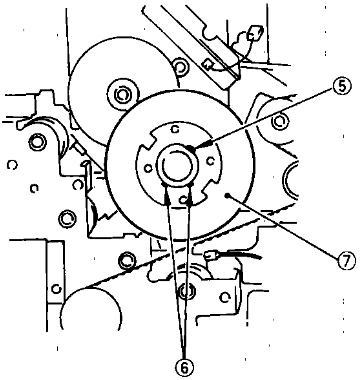


Figure 4-204

7) Remove the screw ⑧, and disconnect the connector ⑨; then, remove the photosensitive drum home position sensor together with its mount ⑩.

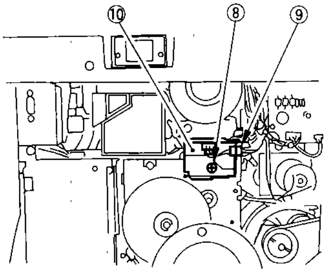


Figure 4-205

8) Disconnect the three connectors ⑪, and remove the seven screws ⑫; then, remove the drum motor together with its mount.

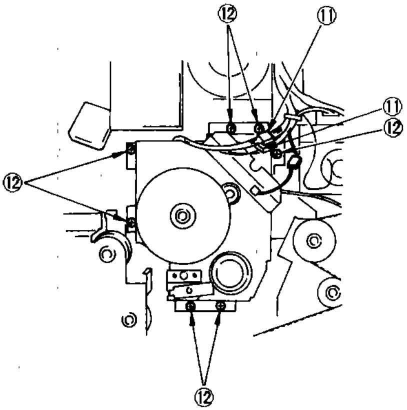


Figure 4-206

9) Remove the four screws, and remove the drum motor from its mount.

Caution

Go through the following steps when installing the drum motor assembly to the machine:

1) Remove the six screws ①, and remove the butting block ②; then, remove the photosensitive drum ③ from the photosensitive drum frame unit ④.

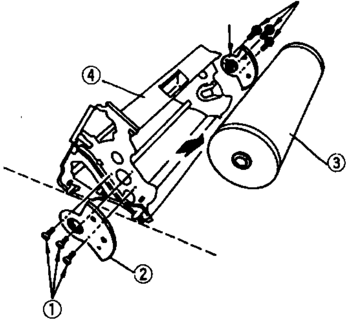


Figure 4-207

3) Insert the photosensitive drum frame unit ⑤ into the machine, and fix it in place using three screws ⑥.

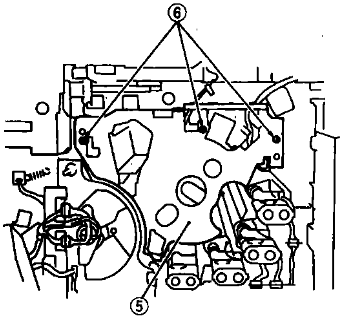


Figure 4-208

4) Temporarily fix the drum motor assembly ⑦ using seven screws ⑧. (If the drum shaft support fixing ⑨ is found, remove it.)

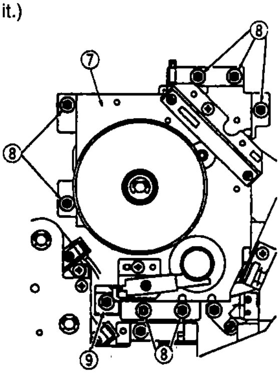


Figure 4-209

5) Attach the drum shaft positioning tool (FY9-3016-000; ⑩) to the photosensitive drum frame unit ⑫ using the two screws ⑪ removed in step 2).

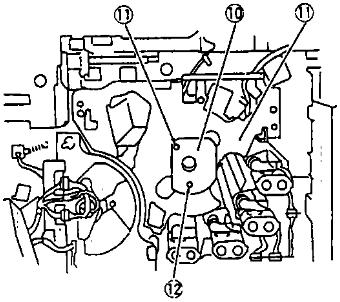


Figure 4-210

6) Fix the drum motor assembly and the drum shaft support plate fixing securely using eight screws.
7) Detach the drum shaft positioning tool, and slide out the photosensitive drum frame unit from the machine; then, install the unit and parts removed in step 1).

2. Detaching the Drum Home Position Sensor

1) Remove the rear cover.
2) Remove the flywheels.
3) Remove the sensor flag ①. (TYPE 2 only)

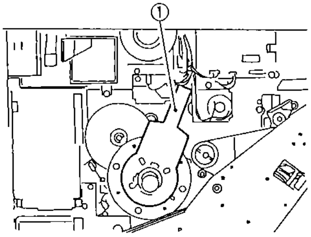


Figure 4-211

4) Disconnect the connector ②, and remove the screw ③; then, remove the drum home position sensor ④ together with its mount. (TYPE 1 only)

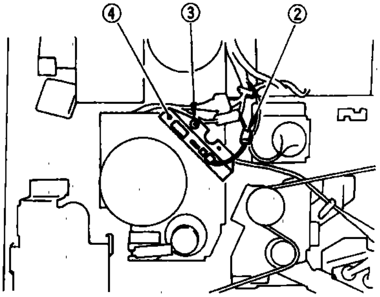


Figure 4-212

5) Remove the screw ⑤, and disconnect the connector ⑥; then, remove the photosensitive drum home position sensor together with its mount ⑦.

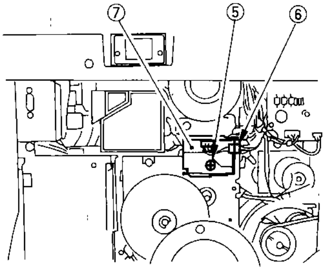


Figure 2-213

6) Remove the sensor from the mount.

3. Detaching the Drum Heater

1) Remove the drum.
2) Put the photosensitive drum with the drum heater friction plate at the bottom.
3) Remove the two screws ①, and remove the drum flange (front) ②.

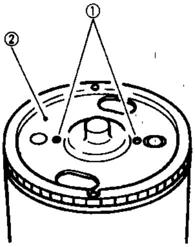


Figure 4-214

4) Disconnect the connector ③, and pull out the drum heater ④.

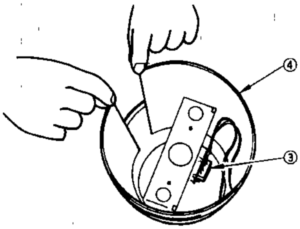


Figure 4-215

4. Detaching the Drum Heater Brush

1) Remove the rear cover.
2) Remove the flywheels.
3) Remove the drum motor. (See II-B-1.)
4) Remove the screw ①, and disconnect the two connectors ②; then, remove the drum heater brush.

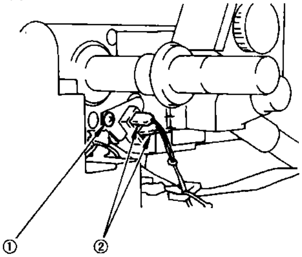


Figure 4-216

C. Main Motor (M4) Drive Assembly

1. Detaching the Main Motor (M4)

1) Remove the rear cover.
2) Remove the flywheels.
3) Remove the screw, and open the DC controller PCB.
4) Remove the seven screws ①, and remove the drive assembly reinforcing plate.

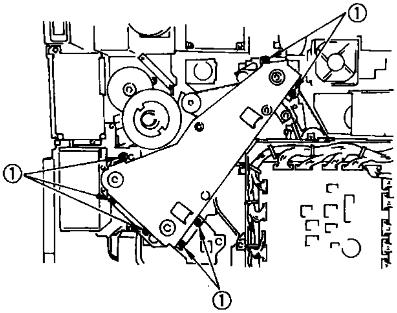


Figure 4-217

5) While holding the tensioner ② up, remove the drive belt 1 ③.

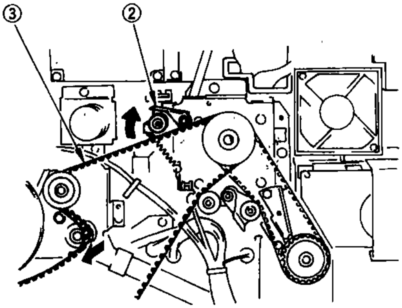


Figure 4-218

6) While pushing the tensioner ④ to the left, remove the drive belt 2 ⑤.

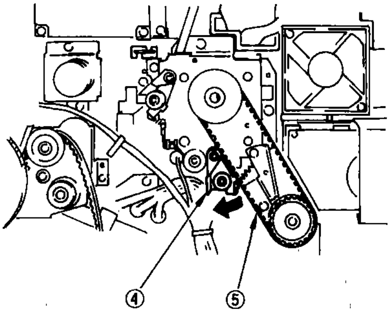


Figure 4-219

7) Disconnect the two connectors ⑥, and remove the four screws ⑦; then, remove the main motor together with its mount.

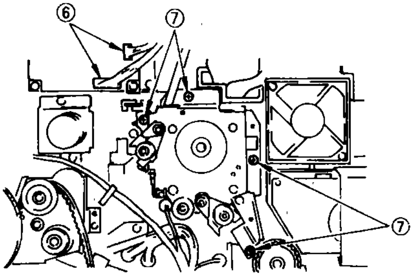


Figure 4-220

8) Remove the four screws, and remove the main motor from its mount.

D. Fixing Assembly Motor (M5) Drive Assembly

1. Detaching the Fixing Assembly Motor (M5)

1) Remove the rear cover.
2) Remove the screw, and open the DC controller PCB.
3) Remove the fixing assembly motor cover. (Pull it out toward the front while opening it up and down.)
4) Disconnect the two connectors ①, and remove the four screws ②; then, pull out the PCB from the locking support ③ to remove the fixing motor together with its mount.

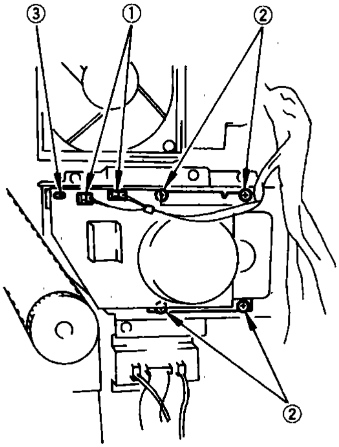


Figure 4-221

E. Pick-Up Motor (M6) Drive Assembly

1. Detaching the Pick-Up Motor

1) Remove the lower right cover.
2) Remove the rear cover.
3) Draw out the cassette 2 or the duplexing unit; then, remove the cassette 2 pick-up assembly or the duplexing unit pick-up assembly.
4) Remove the two screws ①, and remove the duct ② of the ozone exhaust fan.

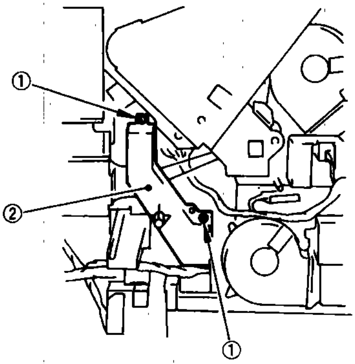


Figure 4-222

5) While releasing the tensioner ③, remove the cassette 1 pick-up assembly drive belt ④.

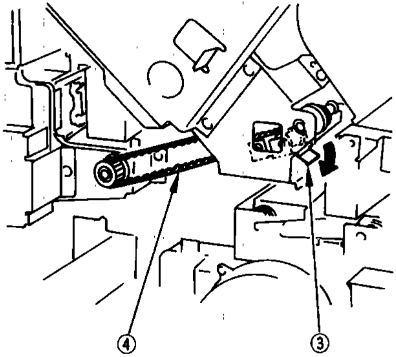


Figure 4-223

6) Free the harness from the locking support ⑤, and remove the locking support.

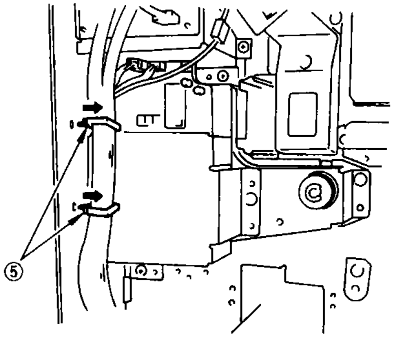


Figure 4-224

7) Remove the two screws ⑥, and remove the grip ⑦ for transport.

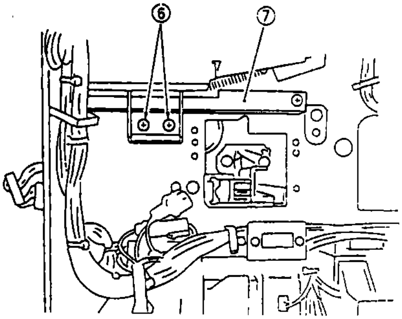


Figure 4-225

8) Disconnect the two connectors ⑧ and relay connector ⑨; then remove the three screws ⑩.

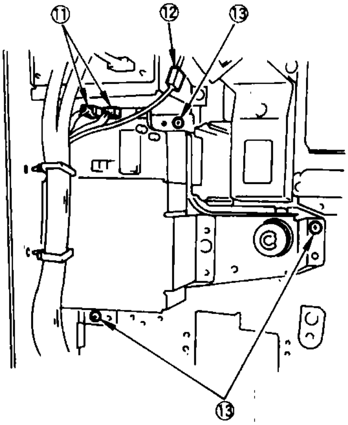


Figure 4-226

9) Release the gear ⑪ of the duplexing unit pick-up assembly/cassette 2 pick-up assembly toward above, remove the pick-up motor unit.

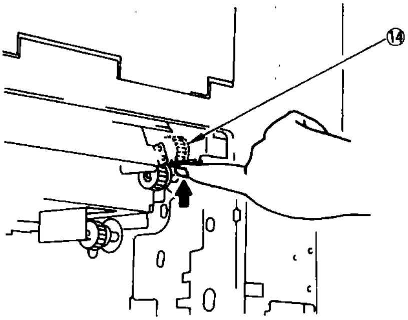


Figure 4-227

10) Remove the screw ⑫, and remove the pick-up motor cover ⑬ from the pick-up motor unit.

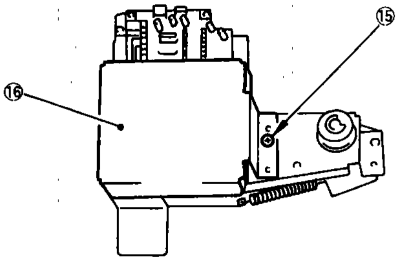


Figure 4-228

11) Remove the two screws ⑭, and remove the pick-up motor ⑮.

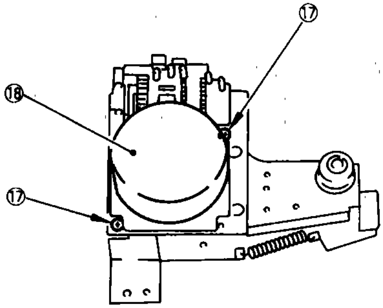


Figure 4-229

F. Developing Assembly Drive Assembly

1. Detaching the Developing Assembly Drive Assembly

1) Remove the rear cover.
2) Remove the flywheels.
3) Remove the screw, and open the DC controller PCB.
4) Remove the seven screws ①, and remove the drive assembly reinforcing plate.

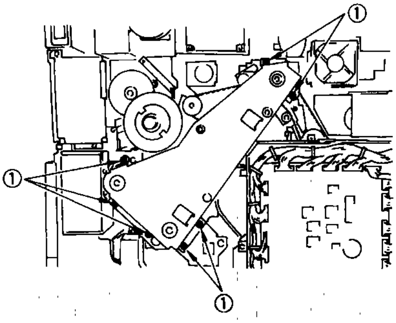


Figure 4-230

5) Remove the two screws ②, and disconnect the three connectors ③; then, remove the lamp regulator PCB ④.

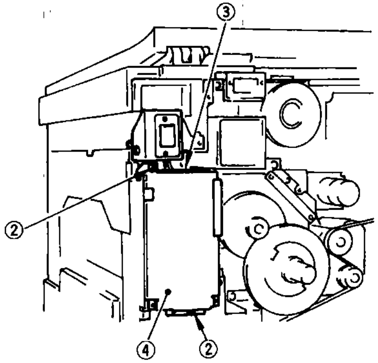


Figure 4-231

6) While holding the tensioner ⑤ up, remove the drive belt 1 ⑥.

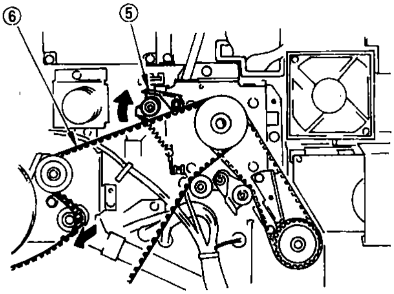


Figure 4-232

7) Disconnect the four connectors ⑦, and remove the two screws ⑧; then, remove the potential measuring PCB ⑨.

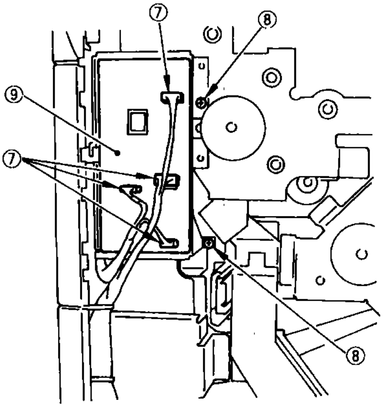


Figure 4-233

8) Open the locking support ⑩, and disconnect the four developing bias high-voltage connector ⑪.

9) Disconnect the two relay connectors ⑫.

10) Disconnect the relay connector of the waste toner clogging detection switch.

11) Remove the three screws ⑬.

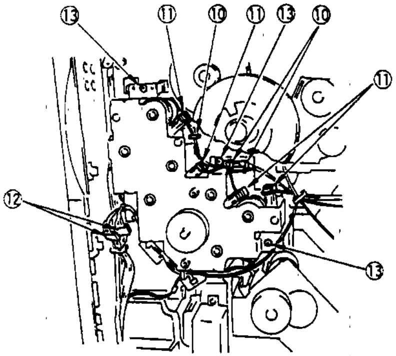


Figure 4-234

12) Shift the developing assembly drive unit up to remove.

Caution:
Note the hooks found at top/botton of the developing assembly drive unit when detaching or attaching it.

Caution:
If poor contact is noted between the developing assembly drive unit and the developing assembly high-voltage supply unit, or a development fault caused by such poor contact, replace the old parts with new ones as shown in XI "Others" in Chaper 4.

G. Photosensitive Drum Cleaner Assembly

1. Detaching the Photosensitive Drum Cleaning Drive Assembly/ Reciprocating Motor

1) Remove the rear cover.
2) Remove the flywheels.
3) Remove the screw, and open the DC controller PCB.
4) Remove the seven screws ①, and remove the drive assembly reinforcing plate.

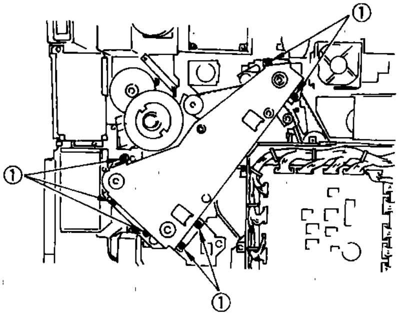


Figure 4-235

5) Remove the upper right cover.
6) Remove the screw ② and two hex screws ③, and remove the gear ④ installed to the drum shaft.

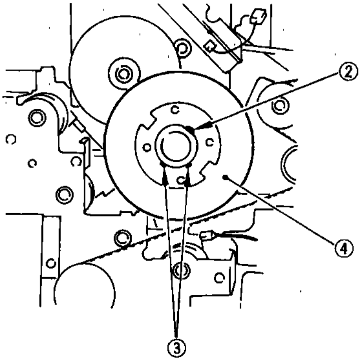


Figure 4-236

7) While holding the tensioner ⑤ up, remove the drive belt 1 ⑥.

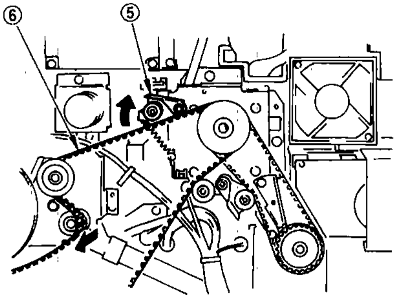


Figure 4-237

8) Disconnect the connector ⑦, and remove the two screws ⑧; then, remove the reciprocating motor.

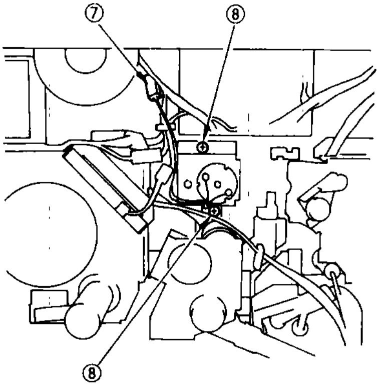


Figure 4-238

Caution:
The one-way clutch is in its active position when the transfer drum is on the transfer assembly frame; do not turn the transfer drum with your fingers inside the transfer drum.
Moreover, do not turn it when the transfer drum is off the transfer assembly frame; otherwise, the transfer drum will rotate in reverse, damaging the transfer brush or retention brush.

9) Remove the three screws ⑨, and remove the photosensitive drum cleaner drive assembly.

Caution:
Take adequate care not to drop the floating gear unit and three bushings inside the photosensitive drum cleaner drive assembly.

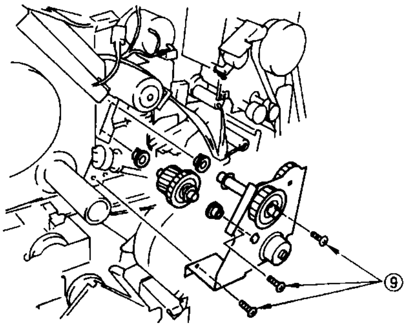


Figure 4-239

Caution:
If the reciprocating motor of the photosensitive cleaner assembly fails to turn off or on, the transistor on the DC controller PCB may be damaged. Be sure to replace the DC controller PCB as necessary.

H. Transfer Drum Cleaner Assembly

1. Removing the Polishing Roller

Caution:
Do not turn the transfer drum with your fingers in its window, as one-way clutch is active while the transfer drum remains fitted in the transfer assembly frame.
Likewise, take extra care after removing the transfer drum, as it will rotate in reverse, causing damage to the transfer brush and retention brush.

1) Detach the transfer drum from the transfer assembly frame.
2) Push the polishing roller toward the front of the transfer drum to remove.

Caution
Take care not to touch the transfer sheet.

2. Removing the Polishing Roller Motor

1) Detach the transfer drum from the transfer assembly frame.
2) Tilt the transfer drum unit as shown in Figure 4-239 to avoid damaging the transfer drum sheet. (If you can, put an object next to the rear side plate of the transfer drum unit.)
3) Remove the drive belt ① of the polishing roller motor, disconnect the connector ②, and remove the three screws ③; then, remove the motor ④.

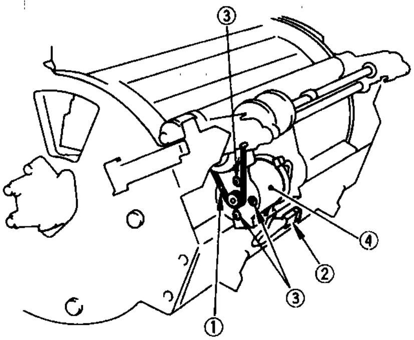


Figure 4-240

3. Detaching the Polishing Roller Unit

1) Remove the transfer drum from the transfer assembly unit.
2) Place the transfer drum unit on a level surface at an angle as shown in Figure 4-233 so as to avoid damage to the transfer drum sheet.
3) Remove the screw ①, and rotate the polishing roller lever ② counterclockwise to release the polishing roller.

Caution:
The four pins ③ used to keep the spring in place will slip off when the transfer drum is released; take care not to lose the pins.

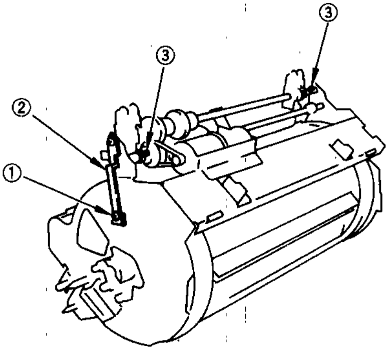


Figure 4-241

4) Remove the screw ④ and E-ring ⑤ (found on the inner side of the shaft 1); then, remove the shaft connecting member, and remove the gear unit 1 ⑥ together with its shaft.

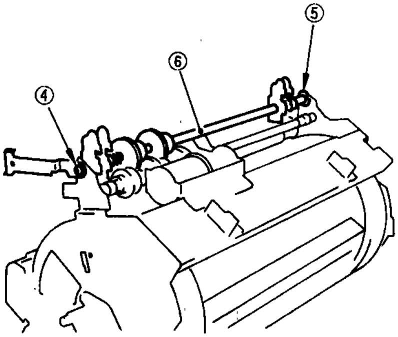


Figure 4-242

5) Remove the E-ring ⑦ (found on the outer side of the shaft 2) and the two screws ⑧; then, remove the polishing roller motor unit ⑨.

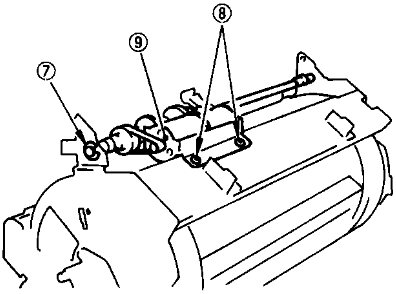


Figure 4-243

4. Detaching the Oil Removing Roller

1) Remove the transfer drum unit.
2) Remove the oil removing roller ① while pushing it against the rear.

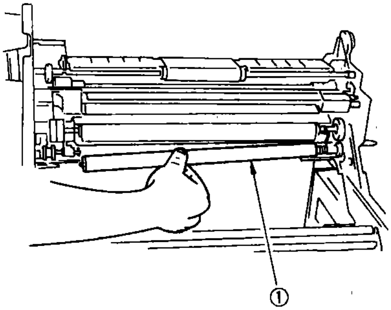


Figure 4-244

5. Detaching the Transfer Cleaner Unit

1) Remove the transfer drum unit.
2) Remove the oil removing roller while pushing it against the rear.
3) Remove the screw ①, and remove the external static eliminator ②.

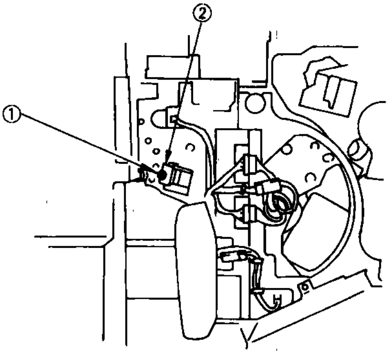


Figure 4-245

4) Remove the two screws ③, and remove the rail ④ of the external static eliminator.

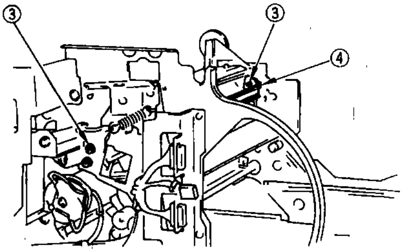


Figure 4-246

5) Remove the screw ⑤, and remove the bushing of the cleaner unit.
Disconnect the connector ⑥, and remove the screw to remove the metal fixing.

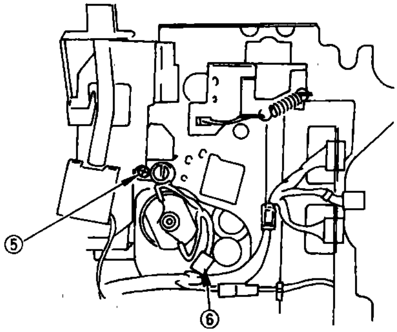


Figure 4-247

6) Remove the transfer cleaner unit ⑦ from the transfer assembly frame as shown in Figure 4-248.

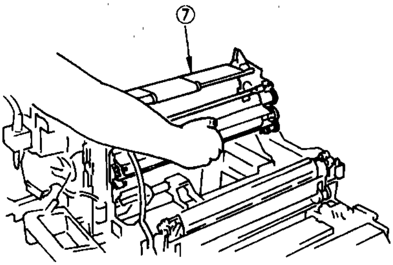


Figure 4-248

6. Detaching the Transfer Cleaner External Brush

1) Remove the transfer drum unit.
2) Remove the oil removing roller while pushing it against the rear.
3) Remove the transfer cleaner unit.
4) Remove the three screws ①, and remove the transfer cleaning unit upper cover ②.

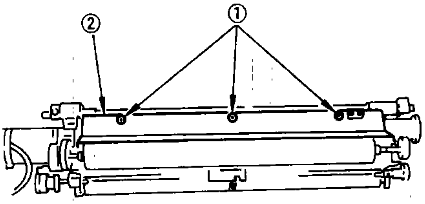


Figure 4-249

5) Remove the E-ring ③ from the rear of the transfer cleaner unit, and remove the spacer ④.

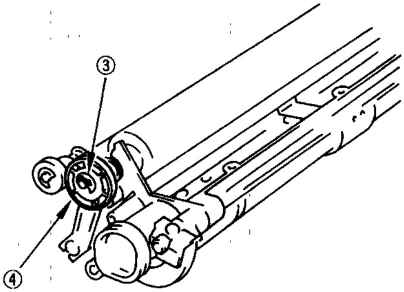


Figure 4-250

6) Remove the two E-rings from the front of the transfer cleaner unit; then, move the line of gears toward the rear, and pull out the parallel pin ⑥; and then remove the three gears ⑦, and remove the spacer ⑧.

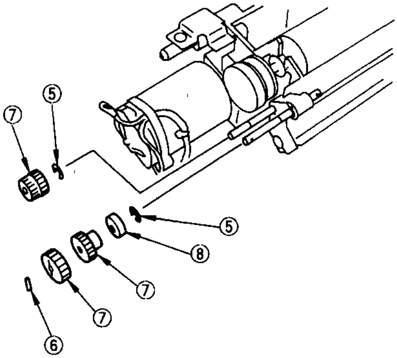


Figure 4-251

7) Remove the E-ring ⑨ and spacer ⑩.

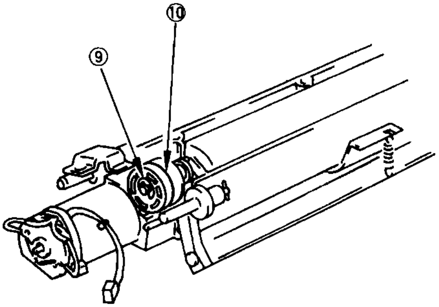


Figure 4-252

8) Remove the timing belt ⑪, and remove the gear ⑫. (At this time, take care not to drop the parallel pin ⑬.)

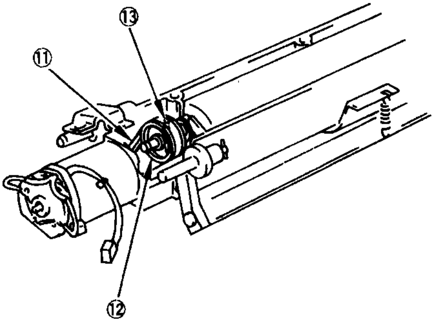


Figure 4-253

9) Remove the two E-rings ⑭, and remove the transfer cleaner external brush unit ⑯ while keeping the bearing ⑮ toward the outside.

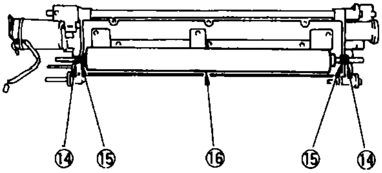


Figure 4-254

10) Loosen the hex screw ⑰ fully, and remove it; then, remove the transfer cleaner external brush ⑱. (Do not remove the E-ring ⑲.)

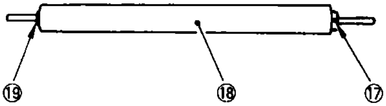


Figure 4-255

7. Detaching the Scraper (upper, lower) of the Transfer Cleaner Unit

1) Remove the transfer drum unit.
2) Remove the oil removing roller while pushing it against the rear.
3) Remove the transfer cleaner unit.
4) Remove the transfer cleaner external brush unit.
5) Remove the three screws ①, and remove the transfer cleaner cover ②.

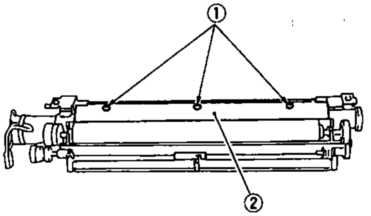


Figure 4-256

6) Remove the three screws ③, and remove the scraper (upper) ④.

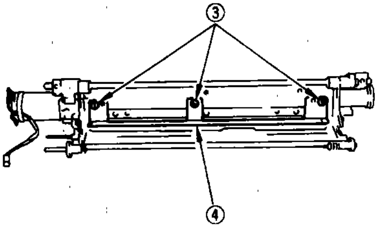


Figure 4-257

7) Remove the three screws ⑤, and remove the scraper (lower) ⑥.

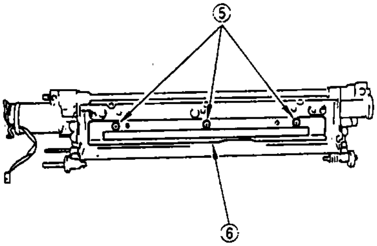


Figure 4-258

8. Removing the Transfer Drum Cleaner Motor

1) Remove the transfer drum unit.
2) Remove the transfer cleaner unit.
3) Remove the two screws ①, and remove the cleaner motor (M10).

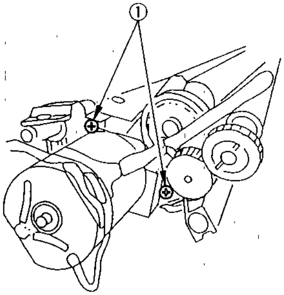


Figure 4-259

I. Scanner Assembly

1. Detaching the Scanner Drive Motor

1) Remove the rear cover, and remove the flywheels.
2) Remove the primary corona assembly fan. (See p. 4-8.)
3) Remove the four screws, and shift the scanner motor driver PCB to the right. (See p. 4-106/107.)
4) Remove the four screws ①, and remove the scanner drive motor ② together with its support plate.

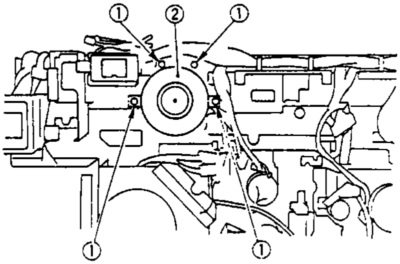


Figure 4-260

5) Remove the two screws, and remove the scanner drive motor from the support plate.

2. Adjusting the Belt Tension When Attaching the Scanner Drive Motor

1) Move the motor to the right, and tighten the screw.

3. Routing the Scanner Cable

You must have the mirror positioning tool (FY9-3002-000) handy when routing the scanner cable.

1) Remove the copyboard cover.
2) Remove the vertical size plate.
3) Remove the copyboard glass.
4) Remove the control panel.
5) Remove the upper rear cover.
6) Remove the upper cover.
7) Remove the two screws ①, and remove the standard white plate ②.

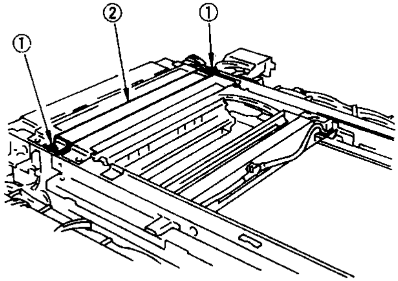


Figure 4-261

8) Remove the rear cover, and remove the flywheel.
9) Remove the three screw ③, and remove the DF mount ④ (rear left; fixing assembly side).

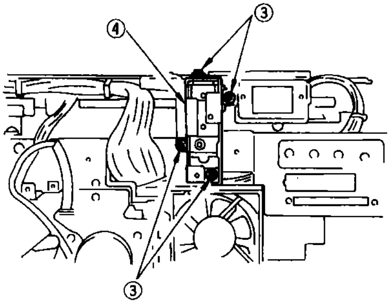


Figure 4-262

10) Move the No. 2 mirror mount, and position it so that its pulley shaft ⑤ is in view through the long hole in the side plate.

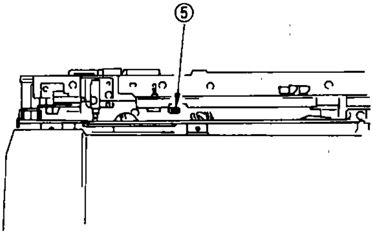


Figure 4-263 (front)

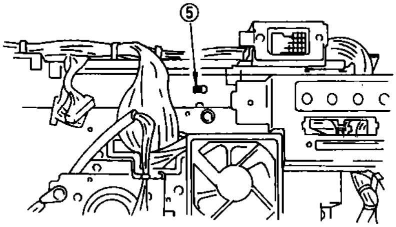


Figure 4-264 (rear)

11) Fit the binding screw ⑥ (M4x8) to the pulley shaft, thereby temporarily fixing the pulley to the side plate (front, rear) and ultimately to the No. 2 mirror mount.

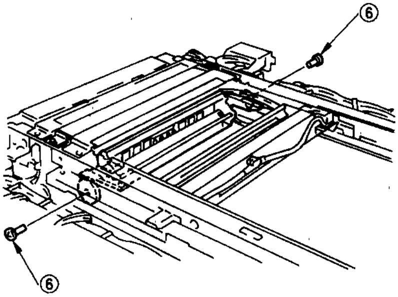


Figure 4-265

Caution:
When installing the standard white plate, make sure that the cut-off is toward the front as indicated.

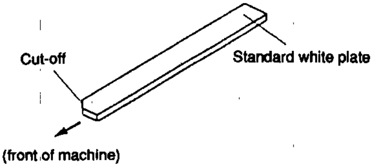


Figure 4-266

12) Engage the scanner cable to the pulley and the hook as indicated in Figure 4-267.

Caution:
Take care not to damage the wire by the edge of the metal plate.

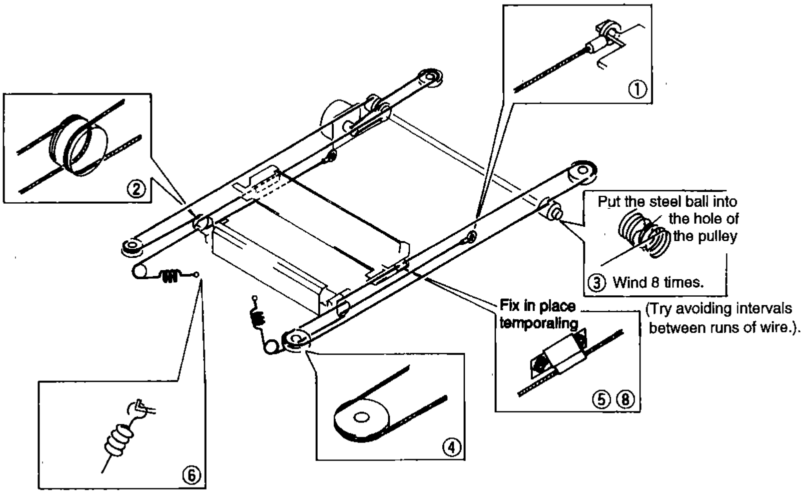

①
②
Put the steel ball into the hole of the pulley
③ Wind 8 times.
Fix in place temporaling
(Try avoiding intervals between runs of wire.).
⑤ ⑧
④
⑥

Figure 4-267

13) Remove the screw (front, rear) fitted in step 11).
14) Loosen the screws on the mirror positioning tool (FY9-3002-000), and fully extend the arm ⑦.

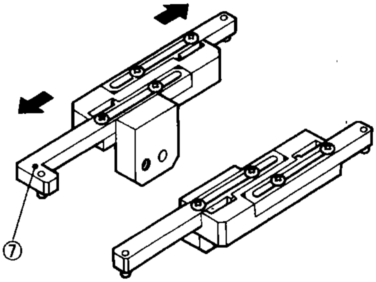


Figure 4-268

15) Fit the mirror positioning tool ⑧ between the No.1 mirror mount and the No.2 mirror mount, and insert the pin ⑨ found on the mirror positioning tool.

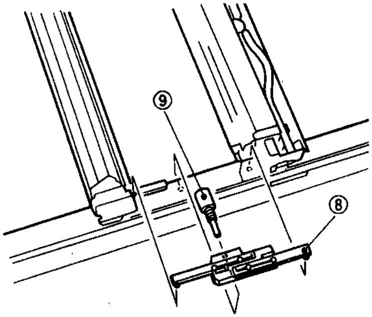


Figure 4-269 (front)

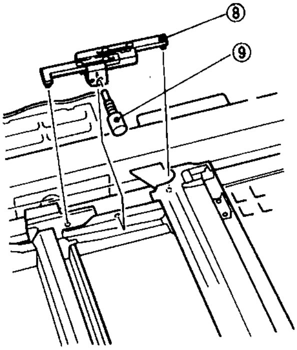


Figure 4-270 (rear)

16) Install the metal fixing ⑩ of the scanner cable to the No.1 mirror mount using screws ⑪ through the angle hole in the side plate.

Caution:
You must remove the scanner motor driver PCB and the main motor PCB when installing the metal fixing at the rear.

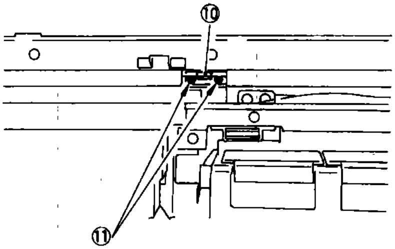


Figure 4-271 (front)

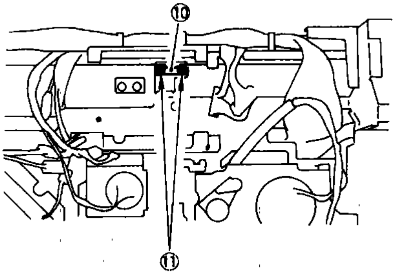


Figure 4-272 (rear)

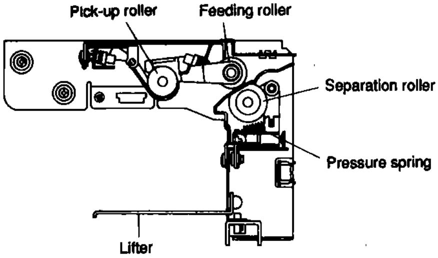
17) Remove the mirror positioning tool.

Reference:
You need not adjust the tension of the cable for the copier.

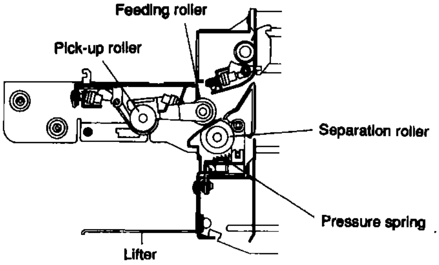
III. FEEDING SYSTEM

A. Pick-Up Assembly

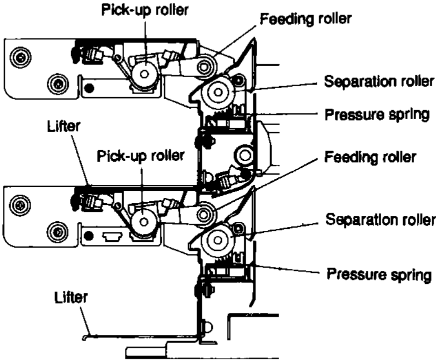
1. Construction


Pick-up roller
Feeding roller
Separation roller
Pressure spring
Lifter

Cassette 1 Pick-up Assembly


Feeding roller
Pick-up roller
Separation roller
Pressure spring
Lifter

Cassette 2 Pick-up Assembly


Pick-up roller
Feeding roller
Separation roller
Pressure spring
Lifter
Pick-up roller
Feeding roller
Separation roller
Pressure spring
Lifter

Cassette 3/4 Pick-up Assembly

Figure 4-3001

2. Detaching the Cassette 1 Pick-Up Assembly

1) Open the front door (left, right).
2) Slide out the cassette 1.
3) Remove the screw ①, and remove the cassette 1 pick-up assembly cover ②.

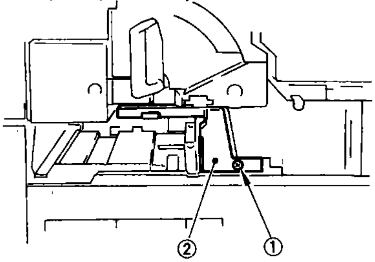


Figure 4-3002

4) Remove the duplexing unit/cassette 2. (See p. 4-100.)
5) Remove the screw, and remove the servicing document case cover; then, remove the two screws, and remove the stay. (CLC700 only)
6) Disconnect the connector ③, and remove the three screws ④; then, slowly slide out the cassette 1 pick-up assembly ⑤.

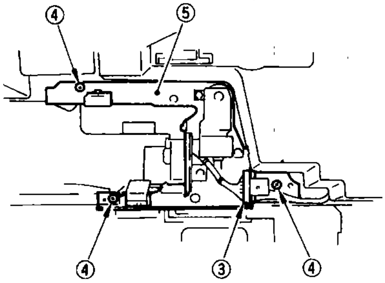


Figure 4-3003

3. Detaching the Cassette 2/ Duplexing Unit Pick-Up Assembly

1) Remove the lower right cover.
2) Slide out the cassette 2 or duplexing unit.
3) Disconnect the two connectors ①, and remove the four screws ②; then, slowly slide out the pick-up assembly to remove.

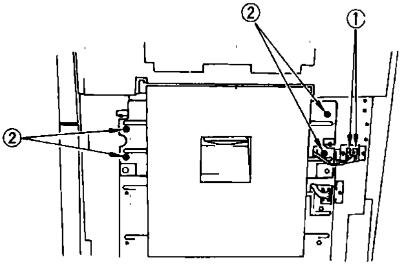


Figure 4-3004

Caution:
Note that the pick-up assembly slides out on its rails about 5 cm in length; it will slide out of the rails if pulled out any farther.

4. Detaching the Cassette 3/4 Pick-Up Assembly

1) Remove the lower right cover.
2) Remove the duplexing unit pick-up assembly.
3) Slide out the cassette 3 and cassette 4.
4) Disconnect the two connectors ①, and remove the four screws ②; then, slide out the pick-up assembly to remove.

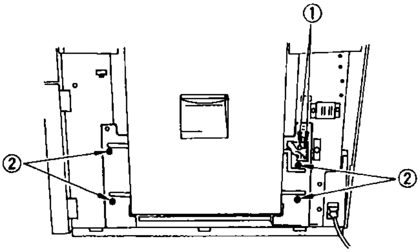


Figure 4-3005

Caution:
You must slide out the cassettes 1, 2, 3, and 4 when attaching each pick-up assembly.

5. Detaching the Pick-Up Roller

1) Remove the cassette 1/2/3/ pick-up assembly.
2) Remove the two E-rings ① (made of resin), and pull out the two pick-up rollers ② together with the collars.

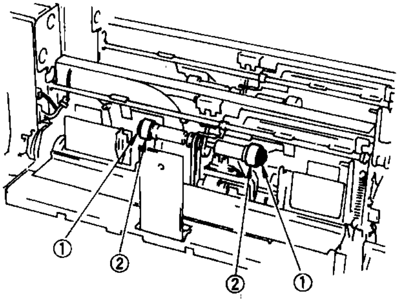


Figure 4-3006

Caution:

a. When attaching the pick-up roller ① to the pick-up assembly, make sure that the round marking ② on its rubber portion is toward the copier's front.

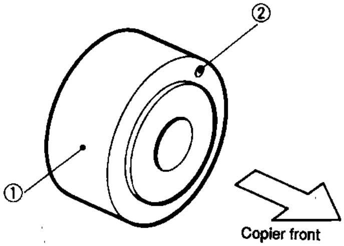


Figure 4-3007

The pick-up rollers are identified by color as follows:

- brass for the front
- silver for the rear

Make sure the correct rollers are used.

b. Do not remove the rubber portion of the pick-up roller from the collar.

6. Detaching the Cassette 1 Pick-Up Assembly Feeding Roller

1) Remove the cassette 1 pick-up assembly.
2) Remove the screw ①, and remove the pick-up assembly support plate ②.

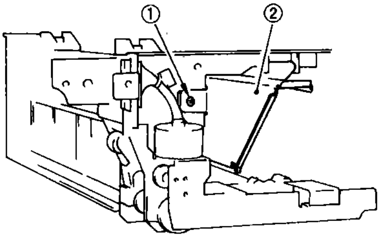


Figure 4-3008

3) Remove the screw ③, and remove the lower guide ④.

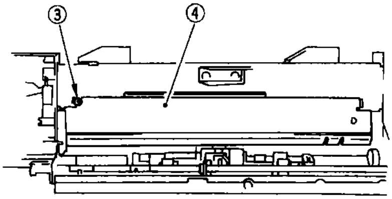


Figure 4-3009

4) Remove the screw ⑤, and remove the upper guide ⑥.

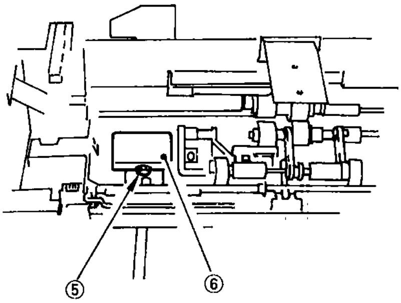


Figure 4-3010

5) Remove the screw ⑦, and remove the pick-up roller arm bushing ⑧.

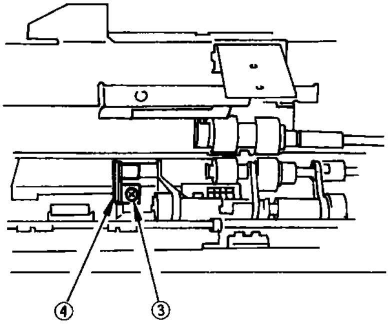


Figure 4-3011

6) Remove the E-ring ⑨ (made of resin), and remove the pick-up roller ⑩ from the rear.
7) Remove the E-ring ⑪ (made of resin).

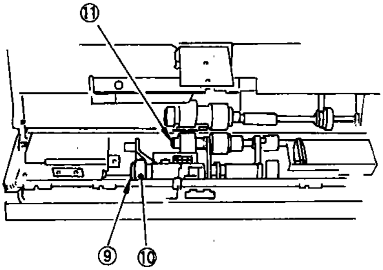


Figure 4-3012

8) Pull off the feeding roller ⑬ from the shaft together with the belt and pick-up roller shaft ⑫.

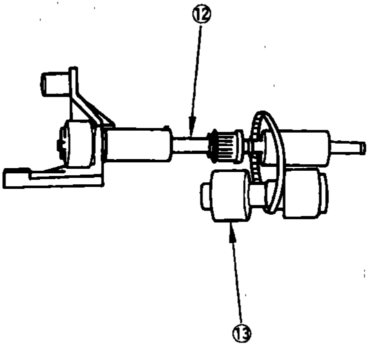


Figure 4-3013

7. Detaching the Cassette 2/3/4 Pick-Up Assembly Feeding Roller

1) Remove the cassette 2/3/4 pick-up assembly.
2) Remove the screw ①, and remove the upper guide ②.

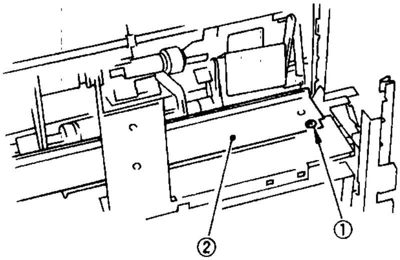


Figure 4-3014

3) Remove the screw ③, and remove the pick-up roller arm bushing ④.

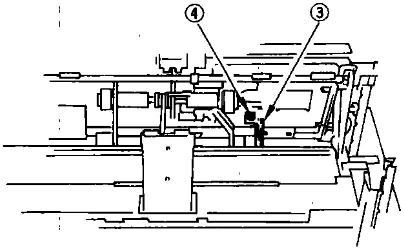


Figure 4-3015

4) Remove the E-ring ⑤ (made of resin), and remove the pick-up roller ⑥ from the rear.
5) Remove the E-ring ⑦ (made of resin).

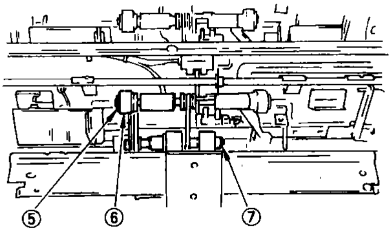


Figure 4-3016

6) Pull out the feeding roller ⑨ from the shaft together with the belt and pick-up roller shaft ⑧.

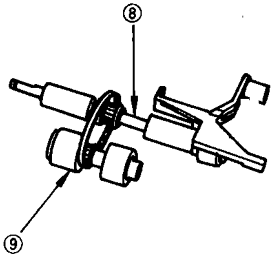


Figure 4-3017

Caution:
Take extra care when detaching the pick-up roller shaft: sensors are installed to some shafts.

Caution:
When attaching the feeding roller ①, make sure that the gear ② installed to the feeding roller is toward the copier's rear.

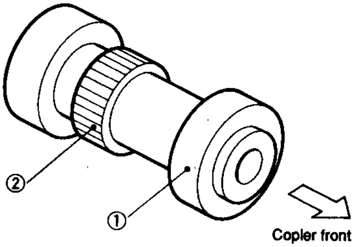


Figure 4-3018

8. Detaching the Cassette 1 Pick-Up Assembly Separation Roller

1) Remove the cassette 1 pick-up assembly.
2) Remove the screw ①, and remove the pick-up assembly support plate ②.

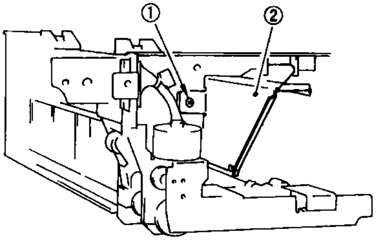


Figure 4-3019

3) Remove the screw ③, and remove the lower guide ④.

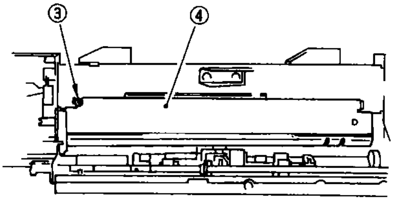


Figure 4-3020

4) Remove the two screws ⑥, and remove the separation roller unit ⑤.

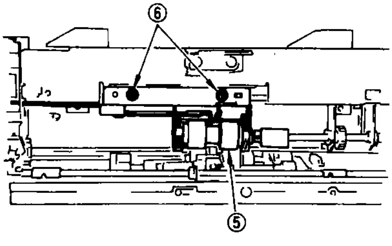


Figure 4-3021

5) Remove the E-ring ⑦ (made of resin).
6) Pull out the separation roller shaft ⑧, and remove the separation roller ⑨.

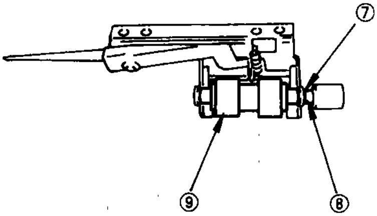


Figure 4-3022

Caution:
When attaching the separation roller ① to the pick-up assembly, make sure that the D-shaped cut is toward the copier's front.

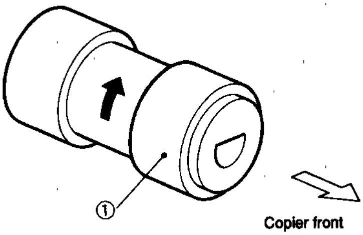


Figure 4-3023

9. Detaching the Cassette 2/3/4 Pick-Up Assembly Separation Roller

1) Remove the cassette 2/3/4 pick-up assembly.
2) Remove the screw ②, and remove the lower guide ①.

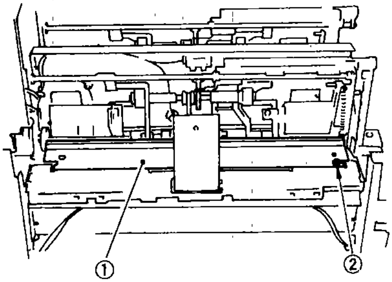


Figure 4-3024

3) Remove the two screws ④, and remove the separation roller unit ③.

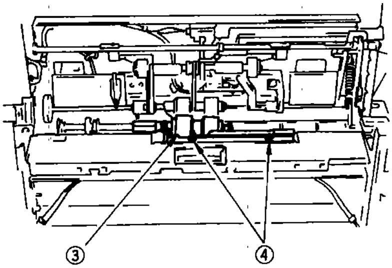


Figure 4-3025

4) Remove the two E-rings ⑤ (made of resin) .
5) Pull out the separation roller shaft ⑥, and remove the separation roller ⑦.

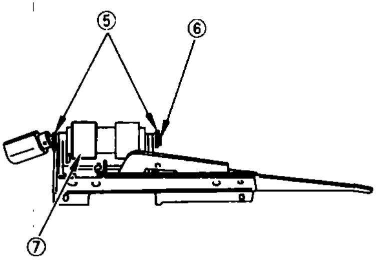


Figure 4-3026

10. Adjusting the Separation Roller Pressure

1) Remove the cassette 1/2/3/4 pick-up assembly.
2) Remove the screw ②, and remove the lower guide ①. (For the cassette 1 pick-up assembly, remove the pick-up assembly support plate first.)

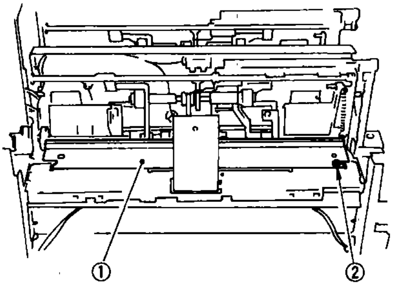


Figure 4-3027

3) If double-feeding or pick-up failure occurs during pick-up operation, adjust the position of the pressure spring ④ of the separation roller ③.
If double-feeding occurs, move the hook of the spring to A.
If pick-up failure occurs, move the hook of the spring to B.

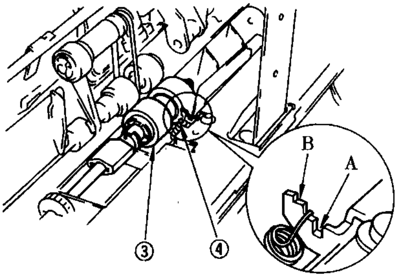


Figure 4-3028

11. Cassette 1/2/3/4/ Pick-Up Assembly Pick-Up Roller Releasing Solenoid

Keep the following in mind when attaching the solenoids (SL16, SL17, SL18, SL19).

While lifting the lever at the rear of the pick-up assembly, install the solenoid so that the pick-up roller arm ① butts against the upper stay ② when the plunger of the solenoid is forced in; see Figure 4-3028.

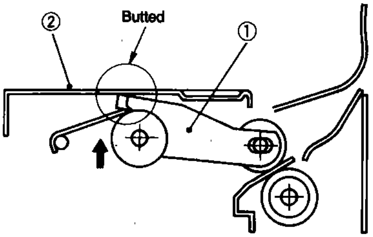


Figure 4-3029

12. Releasing the Lifter

If the lifter ① has moved up, push down the lifter releasing arm ② to move it down.

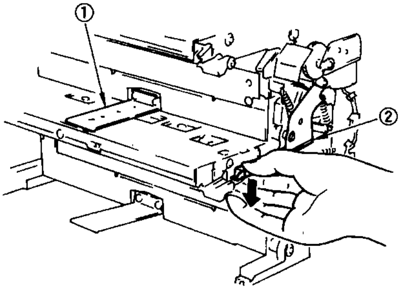


Figure 4-3030

13. Adjusting the Horizontal Registration of the Cassette

1) Remove the cassette from the holder you want to adjust.
2) Turn the adjusting screw ① to adjust the horizontal registration plate so that the horizontal registration on the copy image is 2 ±1 mm.

To increase the registration at the front,

↓

Turn the adjusting screw counterclockwise (a single turn will lead to a change of about 0.7 mm).

To increase the registration at the rear,

↓

Turn the adjusting screw clockwise (a single turn will lead to a change of about 0.7 mm).

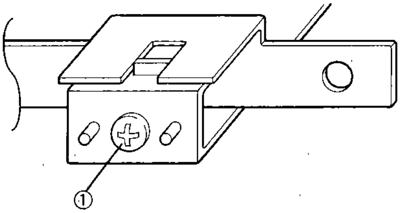


Figure 4-3031

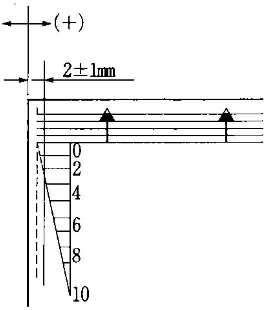


Figure 4-3032

B. Multifeeder Assembly

1. Detaching the Multifeeder Assembly

1) Remove the pick-up assembly.
2) Remove the reader controller PCB cover, multifeeder cover, upper right cover, and center right cover.
3) Disconnect the connector ①, and remove the four screws ②; then, open the pick-up assembly door, and remove the multifeeder assembly.

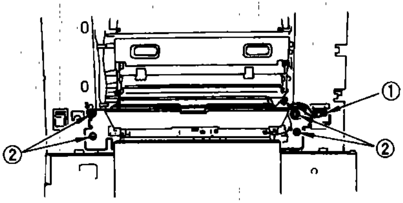


Figure 4-3033

2. Detaching the Multifeeder Pick-Up Roller

1) Remove the E-ring ① (made of resin), and carefully pull out the pick-up roller ②.

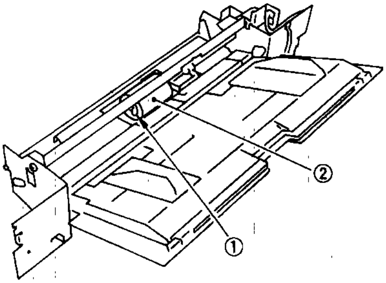


Figure 4-3034

Caution:
The pick-up roller is fixed to the shaft with a parallel pin; take extra care not to drop it when detaching and attaching the roller.

Reference:

When attaching the multifeeder pick-up roller ①, make sure that the side of the collar with a cross ② is toward the copier's rear.

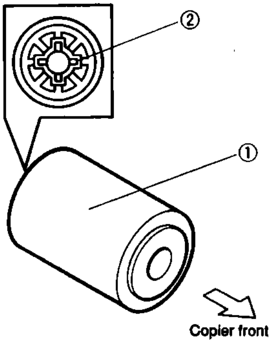


Figure 4-3035

3. Detaching the Separation Pad

1) Remove the multifeeder assembly.
2) Remove the screw ①, and remove the separation pad assembly ②.

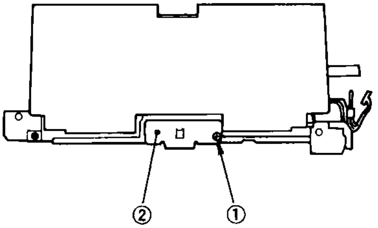


Figure 4-3036

Caution:

Manual Feed Separation Pad

If you have replaced the manual feed separation pad or the manual feed pick-up assembly, you must execute 'aging' in service mode.

(The pad found inside the machine has already been *aged* before shipment to ensure stable pick-up performance.)

Step

1) Make sure no copy paper is found in the manual feed assembly.
2) Activate service mode, and select 'FUNC' and then 'FMISC'.
3) Select 'MF-PAD'.
- The manual feed pick-up roller rotates about 10 min and then stops.

4) Press the Reset key. (The work is finished when you leave service mode.)

4. Adjusting the Separation Pad Pressure

Adjust the position of the pressure spring of the separation pad if double-feeding or pick-up failure occurs during pick-up operation.

① If double-feeding occurs, move the spring holder in the direction of A, thereby increasing the spring tension.

② If pick-up failure occurs, move the spring holder in the direction of B, thereby decreasing the spring tension.

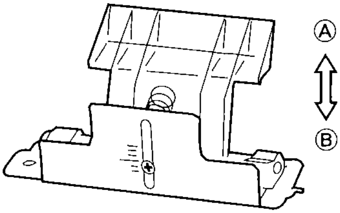


Figure 4-3037

5. Left/Right Registration

If the left/right registration is wrong when feeding from the multifeeder, loosen the screw ① to adjust the position of the tray.

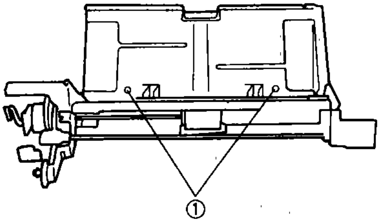


Figure 4-3038

6. Position of the Multifeeder Assembly Paper Guide Cam

Adjust the engagement and the control ring position of the 26T gear 1 and 26T gear 2 so that the paper guide plate and paper guide plate cam are positioned as shown in Figure 4-3039 when the solenoid plate is in contact with the claw of the control ring.

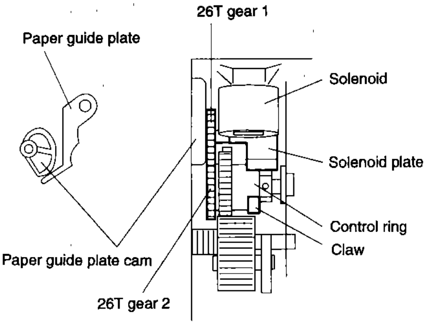

26T gear 1
Paper guide plate
Solenoid
Solenoid plate
Control ring
Claw
Paper guide plate cam
26T gear 2

Figure 4-3039

7. Attaching the Timing Belt of the Multifeeder Assembly

Butt the rack plate of the multifeeder fully against A, i.e., in open position.

Move the slide volume into the direction of B, and install the timing belt to the pulley.

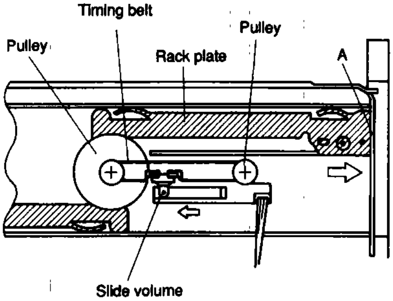

Timing belt
Pulley
Pulley
Rack plate
A
Slide volume

Figure 4-3040

C. No. 1 Feeding Assembly

1. Construction

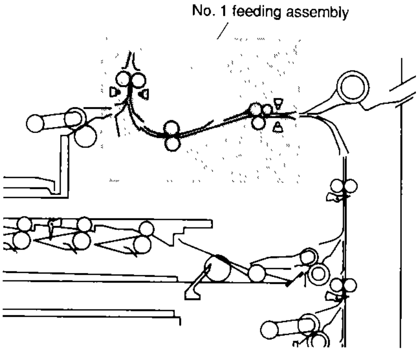


Figure 4-3041

2. Detaching the No. 1 Feeding Assembly

1) Pull out the transfer assembly frame.
2) Disconnect the two connectors ①, and remove the screw ②.

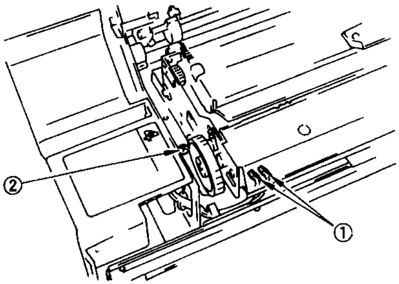


Figure 4-3042

3) Remove the No.1 feeding assembly while sliding it slightly to the front.

3. Replacing the Multifeeder Sensor (PS8)

1) Slide out the transfer assembly frame, and remove the screw ①; then, remove the lower hook of the transfer assembly lower right cover.

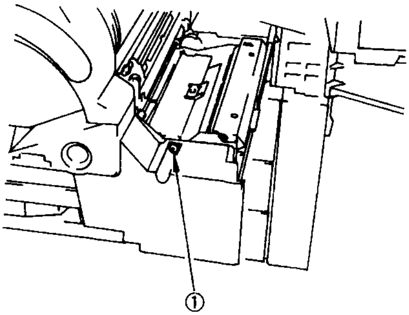


Figure 4-3043

2) Remove the screw ②, and remove the roller cover ③.

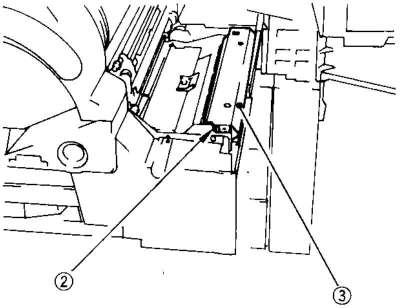


Figure 4-3044

3) Disconnect the connector ④, and remove the screw ⑤; then, remove the multifeeder sensor (PS8) ⑥.

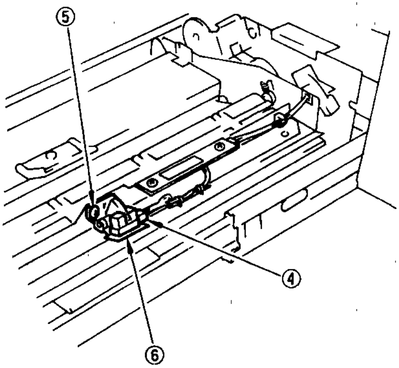


Figure 4-3045

4. Replacing the Light-Emitting Assembly PCB of the OHP Sensor (PS40)

1) Pull out the transfer assembly frame, and remove the screw ①; then, remove the lower hook of the transfer assembly lower right cover.

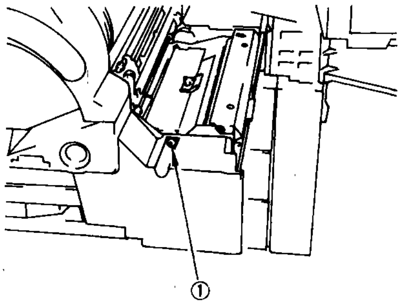


Figure 4-3046

2) Remove the screw ②, and remove the roller cover ③.

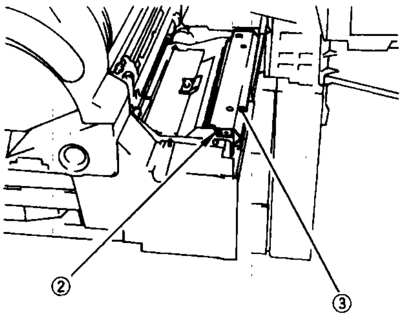


Figure 4-3047

3) Disconnect the connector ④, and remove the two screws ⑤; then, remove the light-emitting assembly PCB ⑥ of the OHP sensor (PS40).

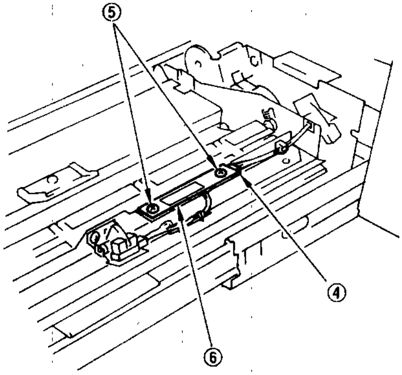


Figure 4-3048

5. Replacing the Light-Receiving PCB of the OHP Sensor (PS40)

1) Slide out the transfer frame.
2) Disconnect the connector ①, and remove the screw ②; then, remove the light-receiving assembly PCB ③ of the OHP sensor (PS40).

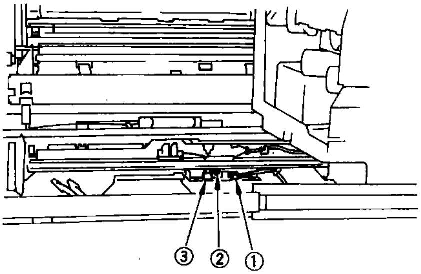


Figure 4-3049

6. Detaching the Pre-Registration Feeding Clutch (CL10)

1) Remove the No. 1 feeding assembly.
2) Remove the screw ①, and remove the roller cover ②.

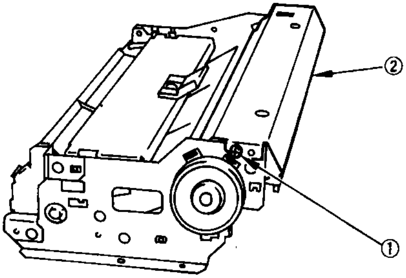


Figure 4-3050

3) Disconnect the connector ③, and remove the grip ring ④; then, remove the pre-registration feeding clutch (CL10) ⑤.

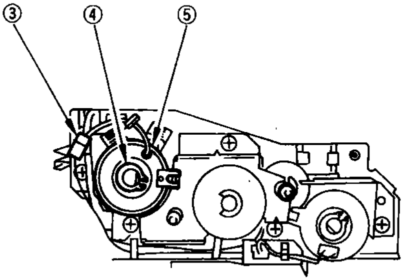


Figure 4-3051

7. Detaching the Manual Feed Feeding Clutch (CL11)

1) Remove the No. 1 feeding assembly.
2) Remove the screw ①, and remove the roller cover ②.

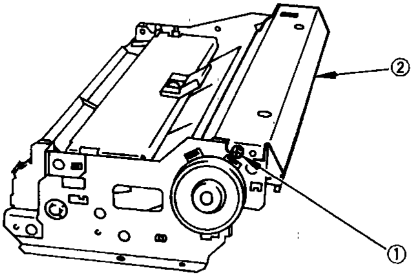


Figure 4-3052

3) Disconnect the connector ③, and remove the grip ring ④; then, remove the manual feed feeding clutch (CL11) ⑤.

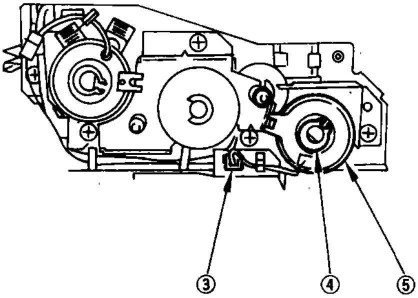


Figure 4-3053

8. Detaching the Retention Push-On Roller Unit

1) Slide out the transfer frame, and remove the transfer cover and transfer frame cover.
2) Remove the screw ① and the registration roller assembly fixing pin ②.

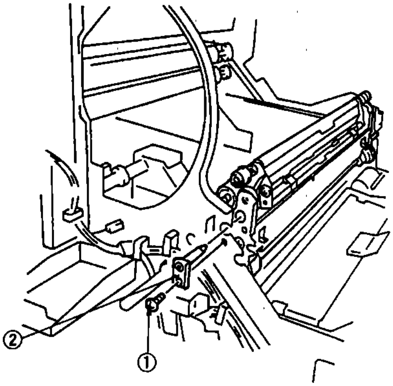


Figure 4-3054

3) Remove the screw ③, and remove the rear plate ④.

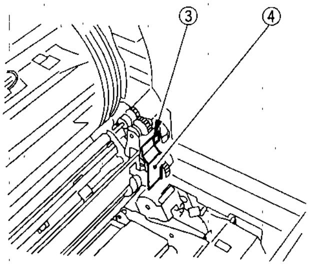


Figure 4-3055

4) Remove the retention push-on roller unit as shown in Figure 4-3056.

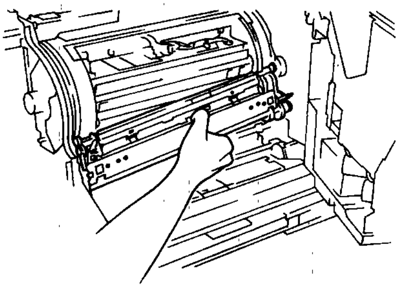


Figure 4-3056

Caution:
Take care so that the retention push-on roller unit or fingers will not come into contact with the transfer sheet.

9. Detaching the Retention Smoothing Roller

1) Remove the retention smoothing roller unit.
2) Remove the E-ring ①, and remove the retention smoothing roller ②.

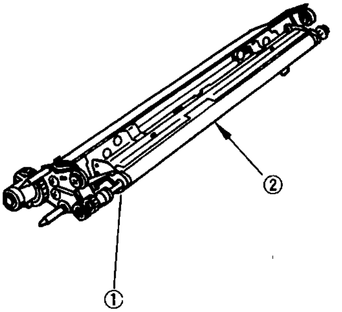


Figure 4-3057

10. Detaching the Scraper Unit of the Retention Smoothing Roller

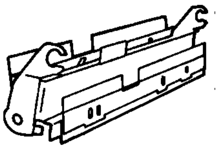


Figure 4-3058

1) Remove the retention push-on roller unit.
2) Remove the retention smoothing roller ①, and remove the two screws ②; then, remove the scraper unit ③.

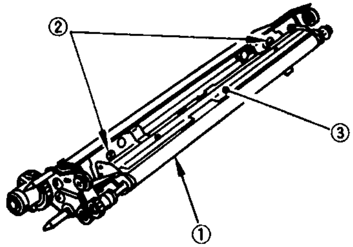


Figure 4-3059

11. Removing the Scrapers 1, 2, and 3 of the Retention Smoothing Roller

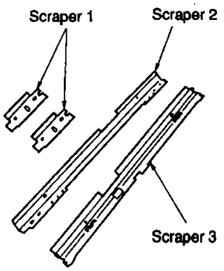


Figure 4-3060

a. Removing the Scrapers 1 and 3

1) Remove the retention push-on roller unit, and remove the retention smoothing roller.
2) Remove the spring ①, and remove the scraper 1 and 2 units. (TYPE 1)

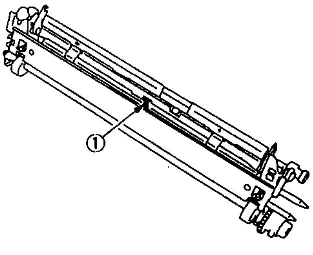


Figure 4-3061

Remove the scraper 1 and 3 units. (TYPE 2)

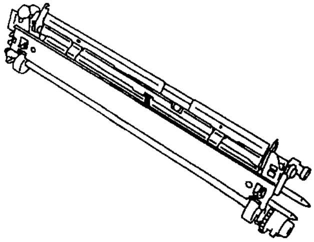


Figure 4-3062

3) Remove the two screws ②, and remove the scrapers 1 and 3. (Keep in mind that the scraper 1 consists of two pieces; see the steps on how to remove the scraper 1.)

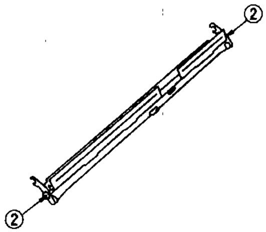


Figure 4-3063

b. Removing the Scraper 2

1) Remove the retention push-on roller unit, and remove the retention smoothing roller.
2) Remove the scraper 1 and 3 units.
3) Remove the two screws ③, and remove the scraper 2 ④.

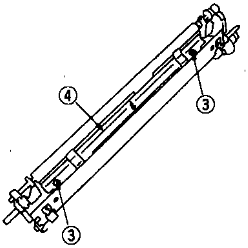


Figure 4-3064

c. Removing the Scraper 1

1) Remove the retention push-on roller unit, and remove the retention smoothing roller.
2) Remove the scraper 1 and 3 units.
3) Remove the two screws, and remove the scraper 2.
4) Remove the screw ⑤, and remove the scraper 1 ⑥.

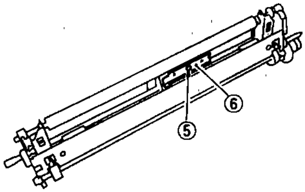


Figure 4-3065

12. Removing the Retention Smoothing Roller Guide Sheet

1) Remove the retention push-on roller unit, and remove the retention smoothing roller.
2) Remove the screw ①, and remove the guide sheet ②.

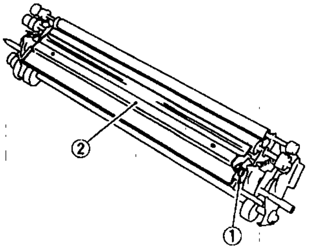


Figure 4-3066

13. Detaching the Registration Clutch (CL9)

1) Put down the transfer drum, fixing assembly, and transfer assembly frame.
2) Remove the retention push-on roller unit.
3) Disconnect the connector ①, and remove the screw ② and grip ring ③; then, remove the registration clutch (CL9).

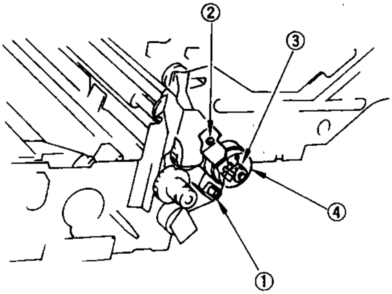


Figure 4-3067

14. Detaching the Registration Roller

1) Remove the registration clutch.
2) Remove the two screws ① and E-ring ②; then, remove the retention roller drive gear unit ③.

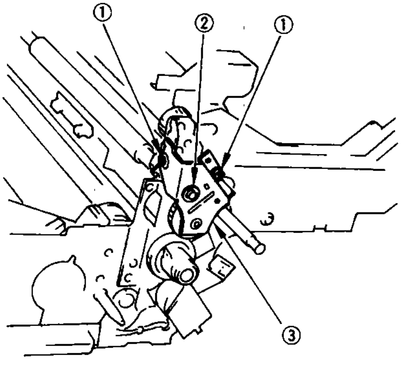


Figure 4-3068

3-1) Remove the roller pressure spring (rear) ④.

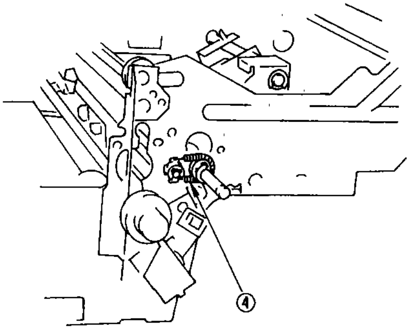


Figure 4-3069

3-2) Remove the three E-rings ⑥ ⑦ from the registration metal roller ⑤.

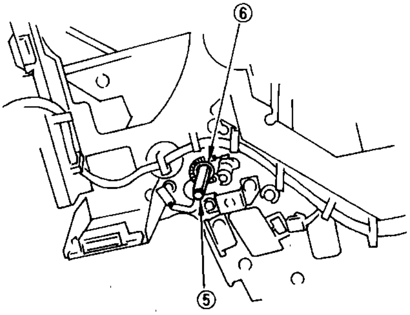


Figure 4-3070 (front)

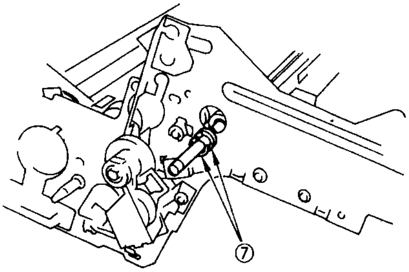


Figure 4-3071 (rear)

4) Pull out the registration metal roller ⑤ as shown in Figure 4-3072.

Caution:
The OHP sensor is found under the registration metal roller; take care not to bring the roller in contact with the sensor.

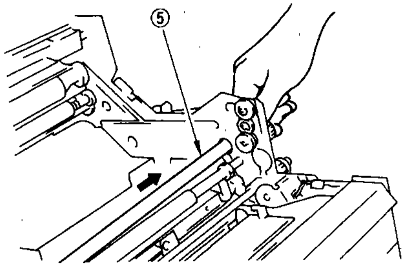


Figure 4-3072

5) Remove the E-ring ⑥ and washer ⑦; then, pull out the bushing ⑧.

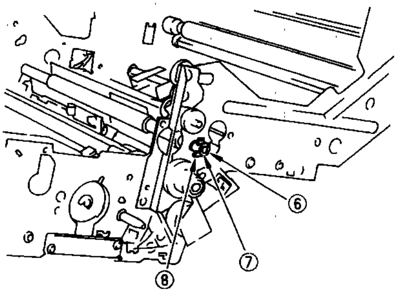


Figure 4-3073

6) While holding the releasing lever ⑨ with one hand, move the roller shaft ⑩ to the right (arrow direction) and pull it off toward the front.

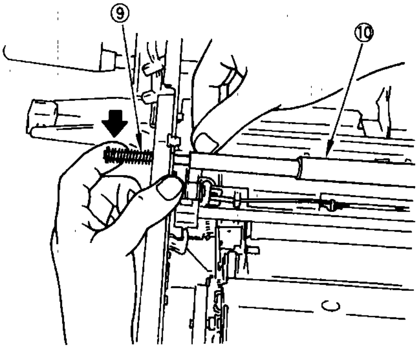


Figure 4-3074

7) Remove the E-ring ⑪ and two washers ⑫, and remove the spring ⑬.

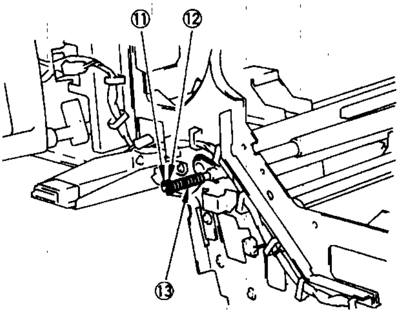


Figure 4-3075

8) Remove the roller pressure spring (front) ⑭.

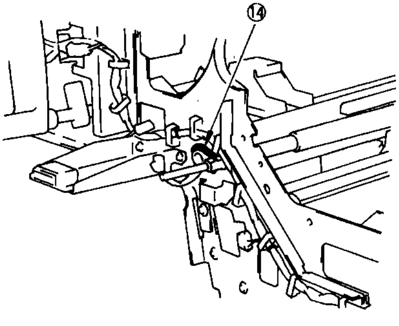


Figure 4-3076

9) Pull out the registration rubber roller ⑮ as shown in Figure 4-3077.

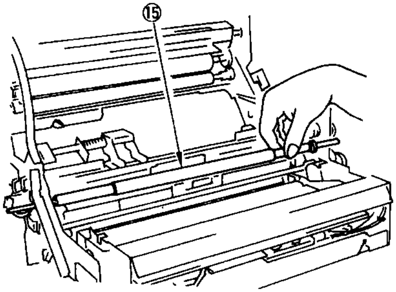


Figure 4-3077

15. Detaching the Registration Releasing Solenoid (SL9)

1) Put down the transfer drum, fixing assembly, and transfer assembly frame.
2) Remove the No. 1 feeding assembly.
3) Disconnect the connector ①, and remove the screw ②; then, remove the registration pressure solenoid ③.

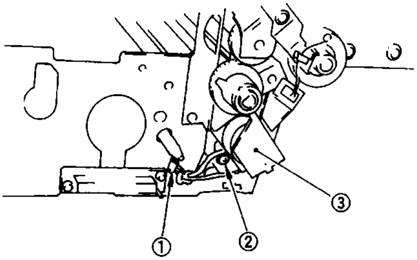


Figure 4-3078

D. No. 2 Feeding Assembly

1-1. Detaching the Feeding Belt (TYPE 1)

1) Pull out the transfer assembly frame, and put down the fixing assembly.
2) Remove the screw ①, and remove the feeding belt unit ②.

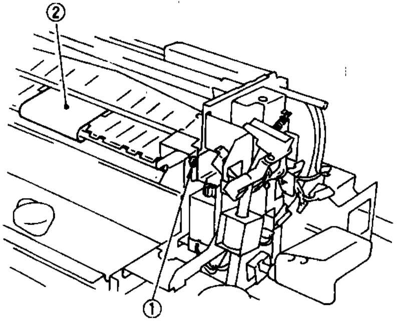


Figure 4-3079

3) Remove the four screws ③, and pull out the guide plate ④.

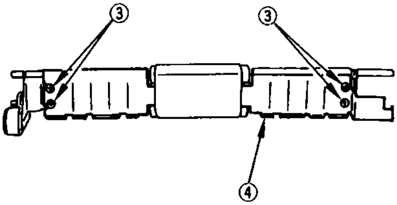


Figure 4-3080

4) Remove the feeding belt drive roller ⑤, and remove the feeding belt ⑥.

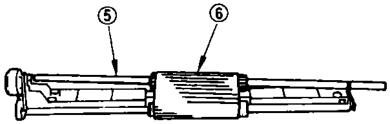


Figure 4-3081

1-2. Removing the Feeding Belt (TYPE 2)

1) Draw out the transfer assembly frame, and take out the fixing assembly.
2) Remove the screw, and take out the feeding belt unit.
3) Remove the E-ring ①, and remove the feeding belt drive roller ②.
4) Remove the feeding belt ③.

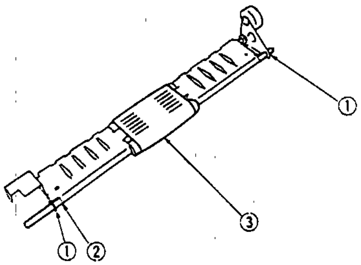


Figure 4-3082

E. Transfer Drum Assembly

1. Construction

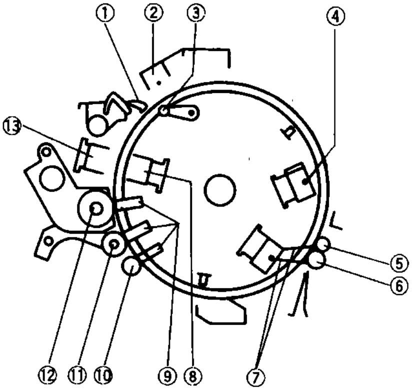


Figure 4-3083

① Separation claw
② Separation corona assembly
③ Separation push-up spacer
④ Transfer brush
⑤ Retention smoothing roller
⑥ Retention roller
⑦ Retention brush
⑧ Internal static eliminator
⑨ Transfer push-on brush
⑩ Transfer polishing roller
⑪ Transfer oil removing roller
⑫ Transfer drum cleaner
⑬ External static eliminator

2. Detaching the Retention/Retention Smoothing Brush

1) Shift the pressure lever to the right to release.
2) Remove the screw ①, and pull out the retention/retention smoothing brush.

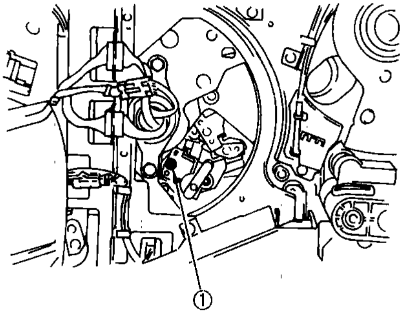


Figure 4-3084

3. Detaching the Transfer Brush

1) Shift the pressure lever to the right to release.
2) Remove the screw ①, and pull out the transfer brush.

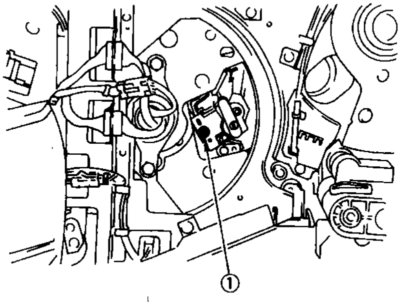


Figure 4-3085

4. Detaching the External Static Eliminator

1) Remove the screw ①, and pull out the external static eliminator ②.

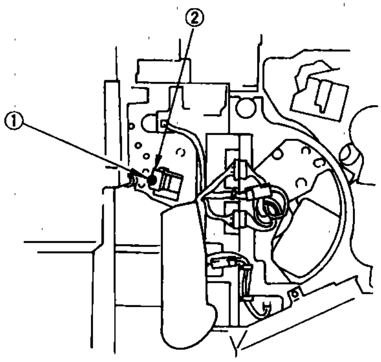


Figure 4-3086

5. Detaching the Transfer Drum

Caution:
The one-way clutch is in its active position when the transfer drum is on the transfer assembly frame; do not turn the transfer drum with your fingers inside the transfer drum.
Moreover, do not turn it when the transfer drum is off the transfer assembly frame; the transfer drum would rotate in reverse, damaging the transfer brush or retention brush.
You must make the following adjustments in service mode (FUNC, ATTRACT) whenever you have replaced the transfer drum:
1 retention position (ATT-TA, ATT-TB)
2 image leading edge margin (RG-XA, RG-XB, RG-Y)
3 transfer delay (TR-DELAY)

1) Open the hopper, and remove the transfer frame cover; then, pull out the transfer frame.
2) Disconnect the connector ① for the separation sensor, three connectors ② for the transfer drum, and the connector ③ for the polishing roller motor.

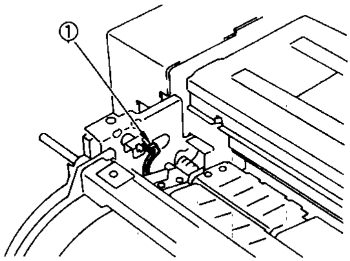


Figure 4-3087

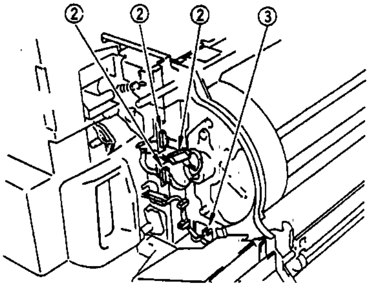


Figure 4-3088

3) Remove the two screws ④, and release the transfer assembly metal fixing.
4) Remove the two screws, and remove the grip.
5) Remove the screw ⑥, and remove the transfer assembly metal fixing ⑦ (binding screw); then, rotate the transfer frame metal fixing toward the front.

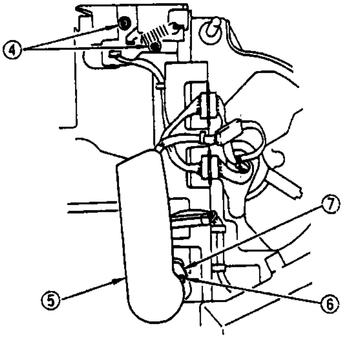


Figure 4-3089

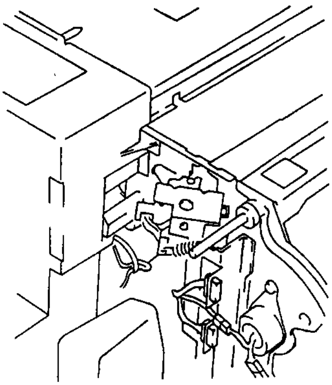


Figure 3-3090 (rotated)

6) Hold the rear of the transfer drum with one hand, and lift the transfer drum by holding its grip with the other hand.

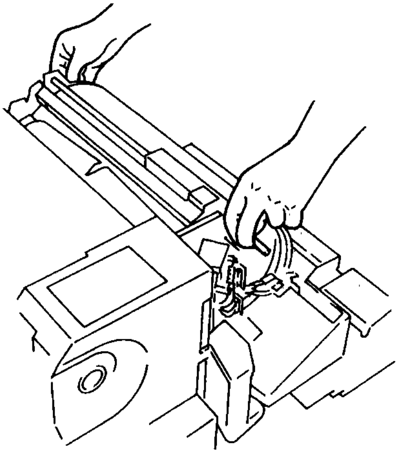


Figure 4-3091

Caution:
Take care not to bring the retention roller in contact with the transfer drum sheet.

7) Place the transfer drum as shown in Figure 4-3092.

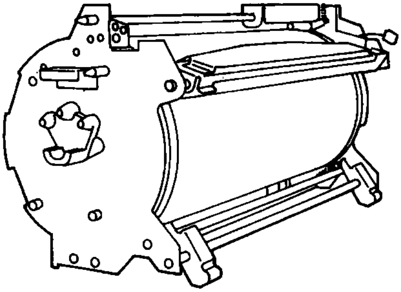


Figure 4-3092

6. Points to Note When Attaching the Transfer Drum

- After placing the transfer drum on the transfer assembly frame, check that it is seated as shown in Figure 4-3093.

Correct

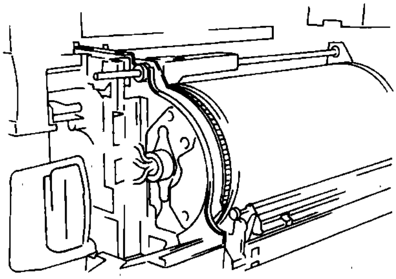


Figure 4-3093

Wrong

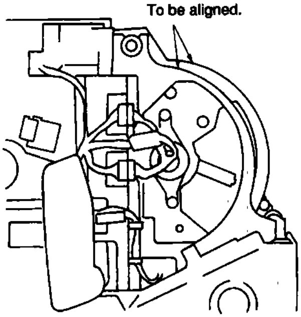


Figure 4-3094

7. Detaching the Internal Static Eliminator

1) Put down the transfer drum from the transfer assembly frame.
2) Rotate the transfer drum so that the hole in the rear plate of the transfer drum and the hole in the transfer drum are matched.
3) Remove the screw ①, and pull out the internal static eliminator ②.

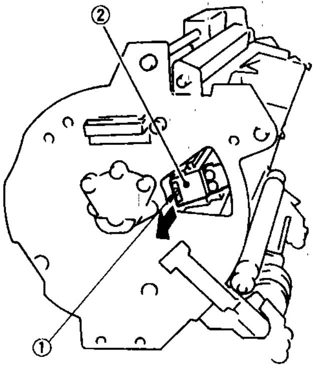


Figure 4-3095

8. Detaching the Separation Corona Assembly

1) Pull out the transfer assembly frame.
2) Remove the screw ①, and remove the separation corona assembly ②.

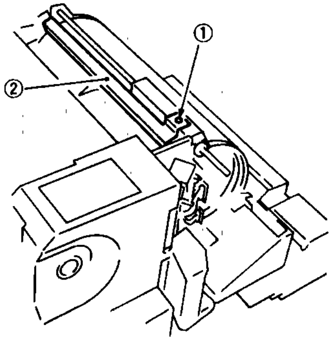


Figure 4-3096

9. Detaching the Separation Sensor

1) Pull out the transfer assembly frame.
2) Put down the transfer drum unit.
3) Remove the two screws ①, and remove the separation guide ②.

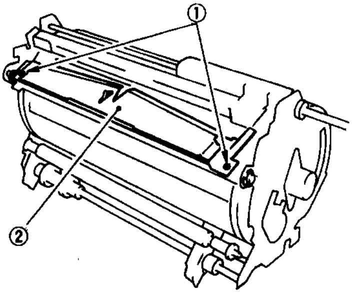


Figure 4-3097

4) Remove the two screws, and disconnect the connector; then, remove the sensor.

10. Removing the Separation Claw

1) Pull out the transfer frame.
2) Remove the two screws, and remove the separation guide. (See Figure 4-3097.)
3) Remove the screw, and remove the separation claw.

Caution:
If the separation claw assembly and the transfer drum assembly do not fit well after replacing the separation claw or if separation faults occur, adjust the position of the separation claw.

11. Replacing the Transfer Drum Sheet

a. Detaching the Transfer Drum Sheet

1) Open the front door, and slide out the hopper; then, open it 180°.
2) Pull out the transfer assembly frame.
3) Put down the transfer drum from the transfer assembly frame.
4) Remove the four screws ①, and remove the transfer drum side scraper ②.

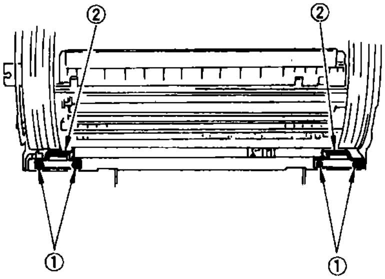


Figure 4-3098

5) Peel the trailing edge of the transfer drum sheet and keep the edge off the drum.

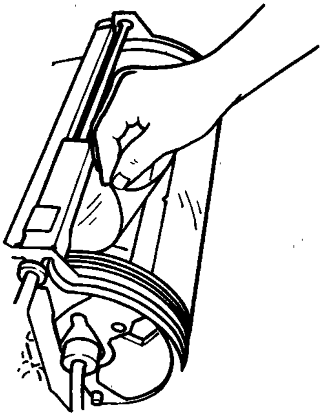


Figure 4-3099

6) Peel the leading edge of the transfer drum sheet.

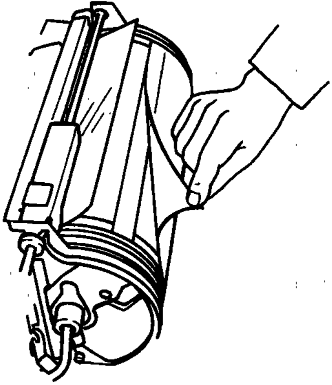


Figure 4-3100

7) Remove the transfer drum sheet by picking up its leading edge.

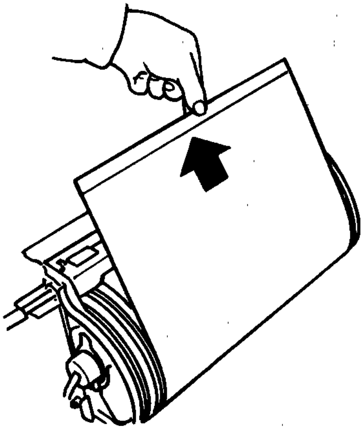


Figure 4-3101

Caution:
If adhesive remains on the ring of the transfer drum, be sure to remove it completely.

b. Attaching the Transfer Drum Sheet

Caution:
Do not touch the areas of the transfer drum sheet where copy paper will come into contact.

Reference:

1. Place copy paper (A3) on the transfer assembly frame to avoid damage to the transfer drum sheet.
2. Install the transfer drum sheet starting on the right side of the copier's front; starting from the front could place the sheet askew.

1) Clean the area of the transfer drum ring where tape will be used with alcohol.
2) Rotate the ring so that the ring connecting plate ③ is positioned as shown in Figure 4-3102.

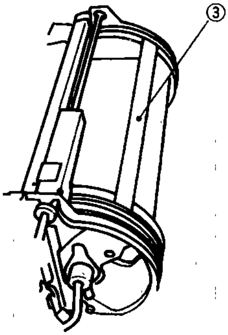


Figure 4-3102

3) Peel the adhesive tape from the leading edge of the transfer drum sheet, i.e., the end along which holes are made in the sheet.
4) Align the holes of the transfer drum sheet with the holes in the connecting plate, and install the leading edge.

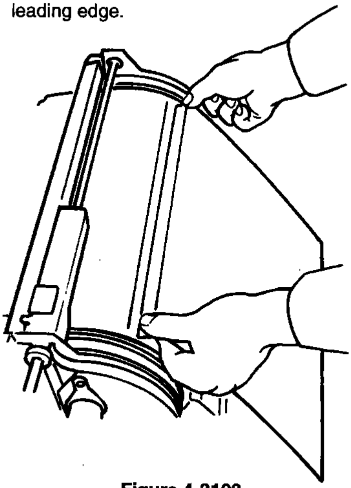


Figure 4-3103

5) Peel the adhesive tape for the transfer drum sheet.
6) Hold the trailing edge of the transfer drum sheet with one hand; let the sheet down on its own weight, and attach the sheet while turning the ring at the front of the transfer drum.

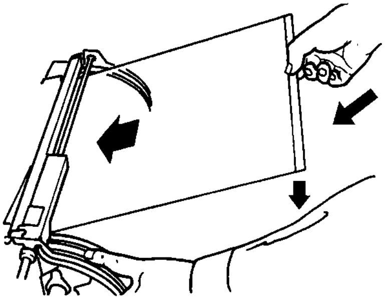


Figure 4-3104

Caution:
Make sure that the gap between the leading and trailing edges of the transfer drum sheet is 0 ±1.5 mm when attachment is complete.

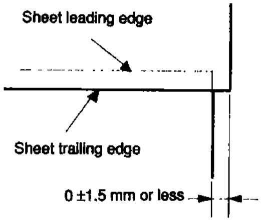

Sheet leading edge
Sheet trailing edge
0 ±1.5 mm or less

Figure 4-3105

7) While pressing the leading edge of the transfer drum sheet, install the sheet as if to tap it from its middle to its ends.

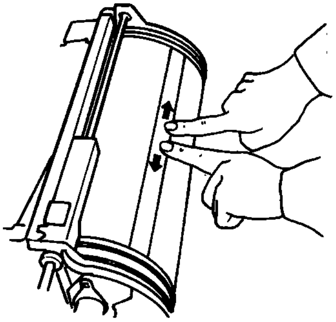


Figure 4-3106

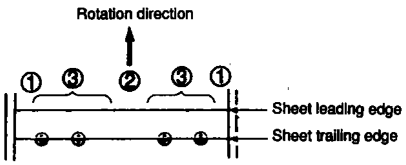

Rotation direction
① ③ ② ③ ①
Sheet leading edge
Sheet trailing edge

Figure 4-3107

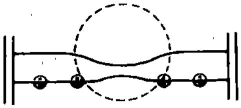


Figure 4-3108

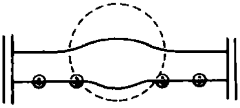


Figure 4-3109

Caution:
Make sure that the center of the transfer drum sheet is free of warps or slack.
A warp will cause the transfer drum sheet to come into contact with the photosensitive drum, in turn causing toner to fuse onto the photosensitive drum and triggering cleaning faults.
Slack, on the other hand, can trigger transfer faults or color displacement.

8) Run fingers along the adhesive tape on the transfer drum sheet once again to ensure proper adhesion.
9) Check the transfer drum for scratches, dents, and slack.
10) Slide the transfer frame into the copier.
11) Turn on the copier, and execute the following:

- Activate service mode, and select 'TCLN' under 'FUNC'.
- Press 'KCLN'.
- Make sure that the transfer drum and the polishing roller rotate and the indication <P> on the control panel display change from 'READY' to 'SERVICE' (about 3 min 30 sec), and then to 'READY'.
- The above operations complete the session.

Caution:
If you have replaced the transfer sheet or the transfer drum unit in the field, have the machine polish the surface of the transfer sheet using service mode. (The transfer sheet that comes with the machine have been polished before shipment; you will find fine lines on the sheet left by the operation.) Executing the polishing operation will serve to prevent adhesion of silicone oil from the 1st side of a two-sided copy to the surface of the transfer sheet when making two-sided copies either in auto or manual mode.
Steps
1) Activate service mode.
2) Select 'FUNC' and then 'TCLN'.
3) Select 'KCLN'.
- The polishing roller will rotate for about 4 min and will stop automatically.

4) Press the Reset key; the work is ended when you leave service mode.

12. Detaching the Separation Push-Up Solenoid

1) Slide out the transfer frame, and remove the transfer drum.
2) Remove the four screws ①, and remove the two transfer sheet scrapers ②.

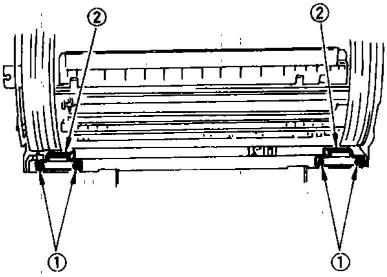


Figure 4-3110

3) Peel the transfer sheet.
4) Disconnect the connector ③, and remove the spring ④.

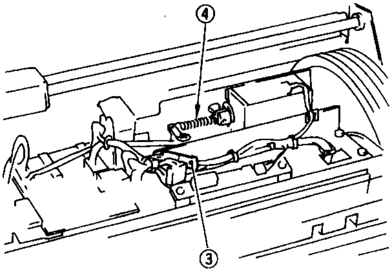


Figure 4-3111

5) Remove the E-ring ⑤ from the transfer drum front plate.

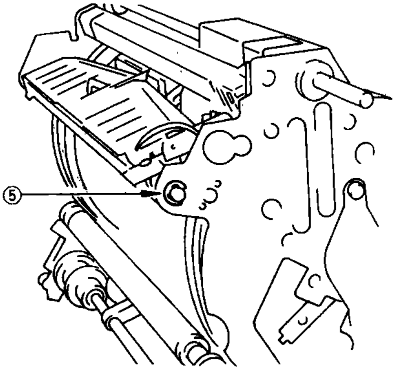


Figure 4-3112

6) Remove the E-ring ⑥ from the transfer drum rear plate, and remove the separation claw unit.

> **Caution:**
> Take note of the separation claw unit.

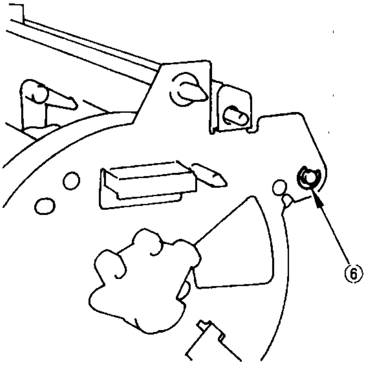


Figure 4-3113

7) Remove the two screws ⑦, and remove the separation push-up solenoid ⑧.

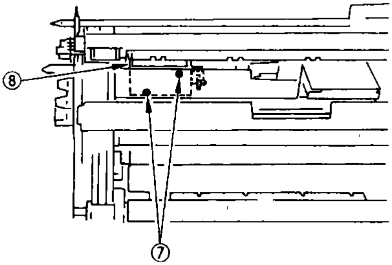


Figure 4-3114

13. Detaching the Brush Drive Motor (M11)

1) Slide out the transfer assembly frame, and remove the transfer drum.
2) Remove the four screws ①, and remove the two transfer sheet scrapers ②.

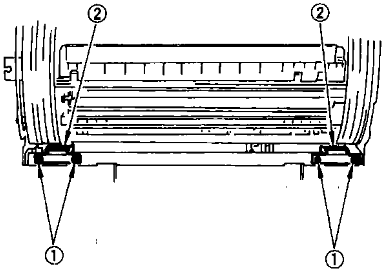


Figure 4-3115

3) Remove the transfer sheet.
4) Disconnect the connector ③, and remove the two screws ④; then, remove the brush drive motor.

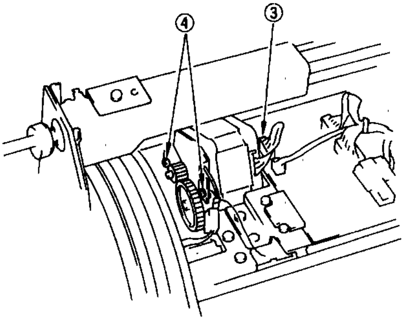


Figure 4-3116

14. Detaching the Brush Drive Motor Home Position Sensor

1) Remove the transfer drum.
2) Remove the transfer sheet.
3) Disconnect the connector ①, and remove the screw ②; then, remove the brush drive motor home position sensor ③.

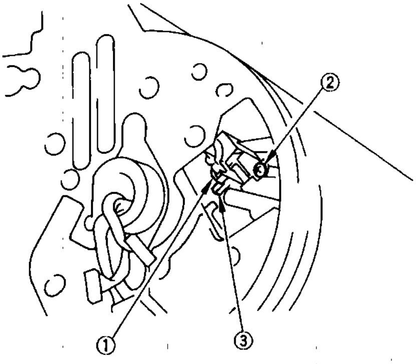


Figure 4-3117

15. Detaching the Transfer Drive PCB

1) Slide out the transfer assembly frame, and remove the transfer drum.
2) Remove the four screws, and remove the two transfer sheet scrapers.
3) Remove the transfer sheet.
4) Disconnect the six connectors ①, and remove the five screws ②; then, remove the transfer driver PCB.

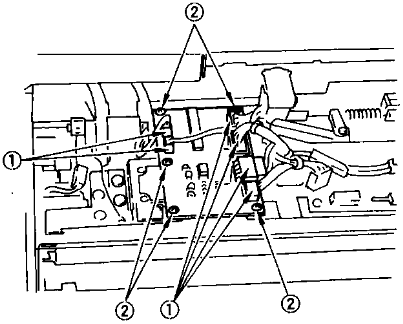


Figure 4-3118

16. Detaching the Side A Sensor

1) Slide out the transfer assembly frame, and put down the transfer drum.
2) Remove the four screws, and remove the two transfer sheet scrapers.
3) Remove the transfer sheet.
4) Disconnect the connector ①, and disengage the clip from behind the sensor mount; then, remove the A side sensor ②.

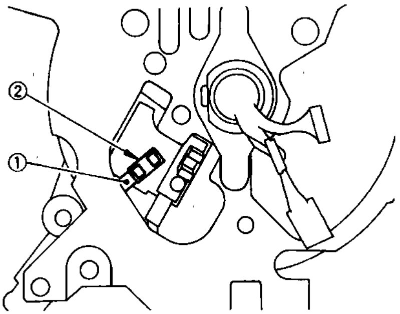


Figure 4-3119

17. Detaching the B Side Sensor

1) Slide out the transfer assembly frame, and put down the transfer drum.
2) Disconnect the connector ①, and remove the screw ②; then, remove the B side sensor ③.

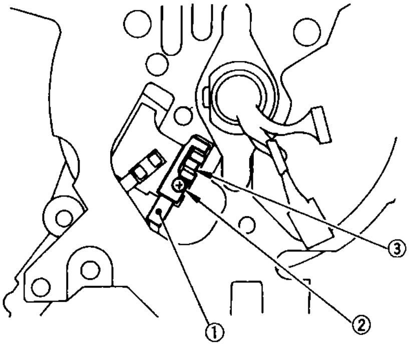


Figure 4-3120

18. Detaching the Separation Push-Up Spacer

1) Slide out the transfer assembly frame, and put down the transfer drum.
2) Remove the four screws, and remove the two transfer sheet scrapers.
3) Remove the transfer sheet.
4) Remove the separation push-up spacer ①.

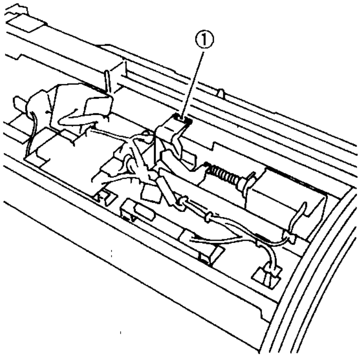


Figure 4-3121

F. Transfer Assembly Frame

1. Detaching the Transfer Assembly Frame

1) Pull out the transfer assembly frame.
2) Put down the fixing assembly.
3) Put down the transfer drum.
4) Take out the transfer frame by holding its grips.

Caution:
The transfer assembly frame weighs about 10 kg; take care when moving it.

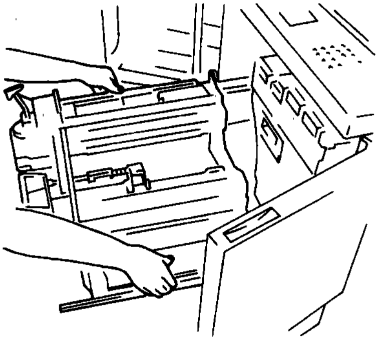


Figure 4-3122

2. Detaching the Registration Roller Assembly

1) Pull out the transfer assembly frame.
2) Remove the screw ① and the registration roller assembly fixing pin ②.

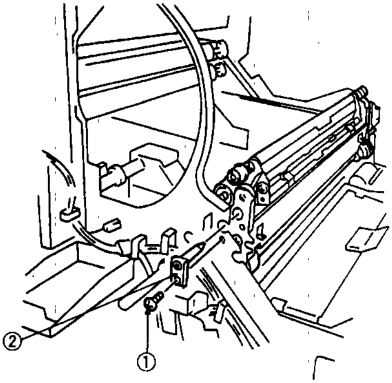


Figure 4-3123

3) Remove the registration roller assembly.

Caution:
1. Take care not to bring the gears and the like of the registration roller assembly into contact with the transfer sheet.
2. Do not hold the roller assembly or scraper assembly with fingers or the like.

G. Delivery Assembly

1. Detaching the Delivery Assembly

1) Remove the upper left cover.
2) Remove the delivery assembly upper cover.
3) Remove the four screws ①, and disconnect the two connectors ②.

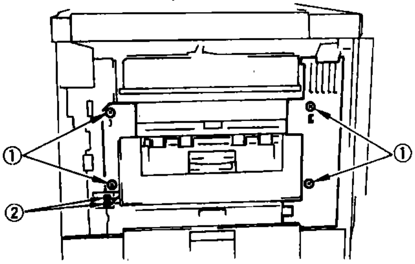


Figure 4-3124

4) Slide out the delivery assembly with care.

2. Positioning the Delivery Assembly Paper Deflector Drive Solenoid (SL20)

1) Remove the delivery assembly.
2) Place the delivery assembly on a level surface.
3) Keep the paper deflecting plate ② so that it butts against the delivery assembly upper guide ③ while viewing the delivery assembly from its side (rear) when the solenoid ① is on; then, loosen the adjusting screw ④ to make adjustments.

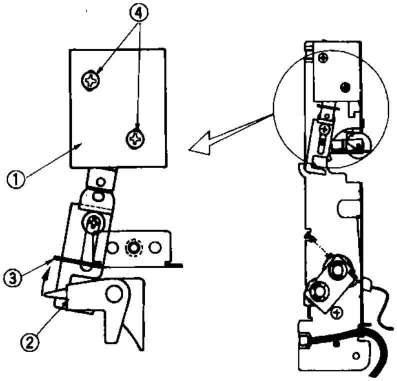


Figure 4-3125

H. Duplexing Reversing Assembly

1. Detaching the Duplexing Reversing Assembly

1) Remove the upper left cover.
2) Remove the lower left cover.
3) Slide out the duplexing unit.
4) Remove the six screws ①, and disconnect the three connectors ②.

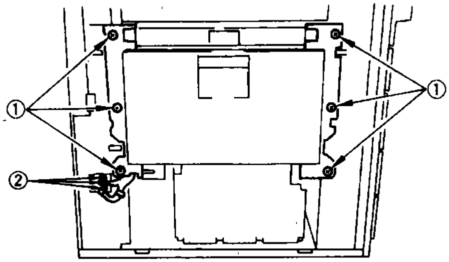


Figure 4-3126

5) Slide the reversing unit slowly to remove.

2. Detaching the Duplexing Reversing Assembly Switch-Back Motor (M17)

1) Remove the duplexing reversing assembly.
2) Open the duplexing reversing assembly door.
3) Remove the two screws ①.

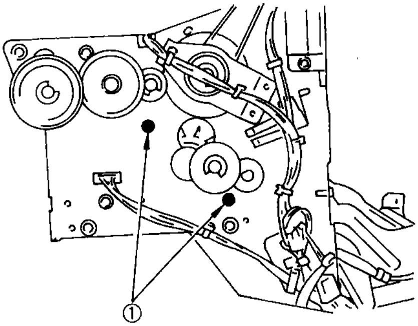


Figure 4-3127

4) Disconnect the connector ②, and hold the duplexing reversing assembly switch-back motor ③; then, disengage the gear, and remove the motor.

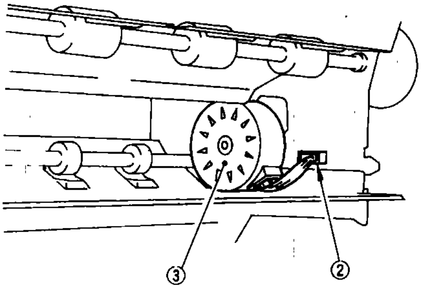


Figure 4-3128

3. Detaching the Duplexing Drive Clutch (CL22)

1) Remove the duplexing reversing assembly.
2) Disconnect the connector ①, and remove the screw ②.
3) Remove the C-ring ③.
4) Loosen the hex screw ④, and remove the duplexing drive clutch.

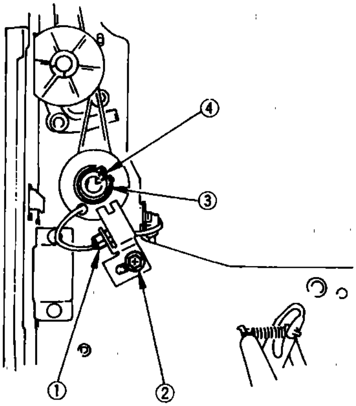


Figure 4-3129

4. Detaching the Duplexing Reversing Clutch (CL23)

1) Remove the rear cover.
2) Remove the screw, and open the DC controller PCB.
3) Remove the drive belt ① as shown in Figure 4-3130.

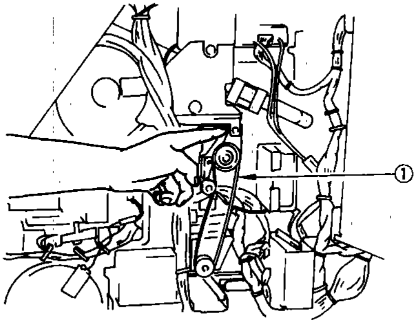


Figure 4-3130

4) Remove the three screws ②, and remove the gear cover.

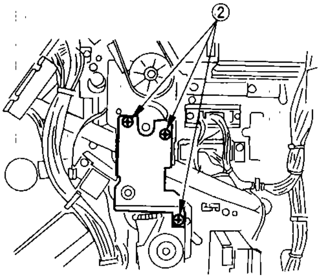


Figure 4-3131

5) Disconnect the connector ③, and remove the two screws ④; then, shift the duplexing reversing clutch unit ⑤ to the right to remove.

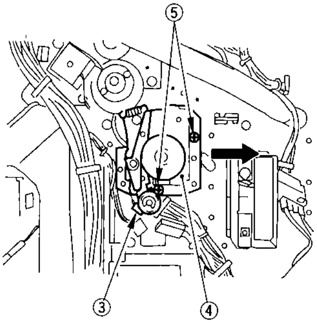


Figure 4-3132

6) Remove the two screws ⑤ of the duplexing reversing clutch unit; then, remove the clutch cover ⑥.

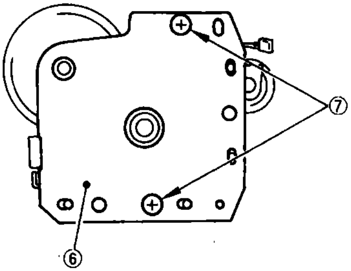


Figure 4-3133

7) Remove the bearing ⑦, and remove the E-ring ⑧ and C-ring ⑨, and loosen the hex screw ⑩.

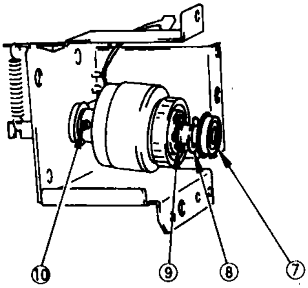


Figure 4-3134

8) Remove the duplexing reversing clutch.

IV. EXPOSURE SYSTEM

A. Scanning System

1. Removing the Scanning Lamp

1) Disconnect the power plug.
2) Remove the copyboard glass.
3) Remove the three screws ①, and remove the anti-deflection plate ②.

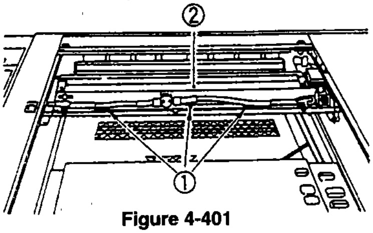


Figure 4-401

4) Turn a flat-blade screwdriver in the direction of the arrow ③ to open the electrode plate in the direction of the arrow ④ to remove the scanning lamp.

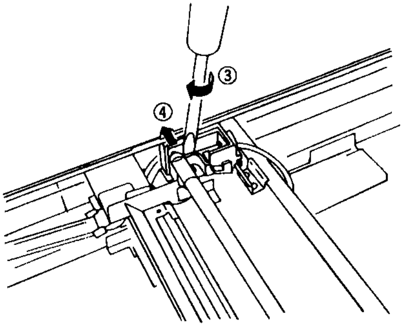


Figure 4-402

Caution:
1. Wait until the scanning lamp has cooled before starting the work.
2. Do not leave fingerprints on the scanning lamp.
3. If the surface of the scanning lamp is soiled, dry-wipe it.

2. Orientation of the Lamp

Hold the lamp so that the bump ① in the middle is in the direction of the arrow; lengthwise, put the lamp with the logo mark toward the rear.

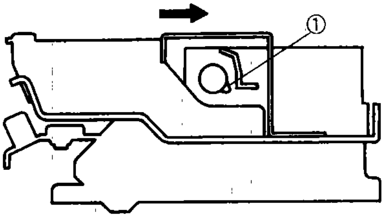


Figure 4-403

Caution:
Do not touch the lamp with your fingers when handling it.

3. Detaching the Standard White Plate

1) Disconnect the power plug.
2) Remove the copyboard glass.
3) Remove the two screws ①, and remove the standard white cover ②.

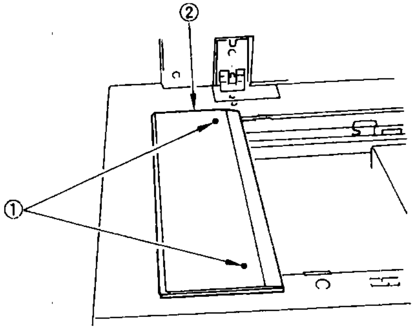


Figure 4-404

4) Remove the two screws ③, and remove the standard white plate ④.

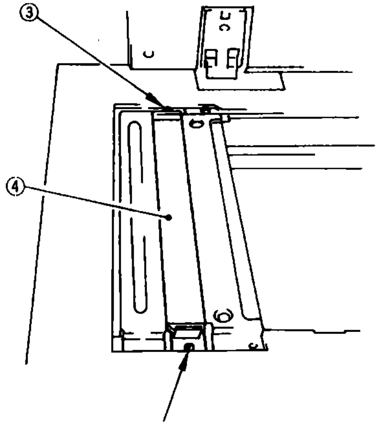


Figure 4-405

4. Detaching the Lens Mount Cover/ CCD Cover/CCD Unit

1) Disconnect the power plug.
2) Remove the copyboard glass.
3) Remove the four screws, and remove the lens mount cover.

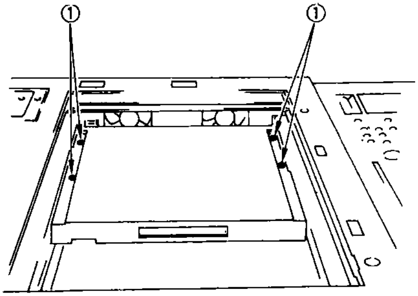


Figure 4-406

4) Remove the CCD cover ②.

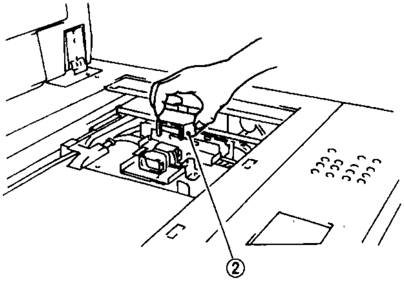


Figure 4-407

5) Remove the two screws ③, and remove the two CCD unit retaining springs ④.

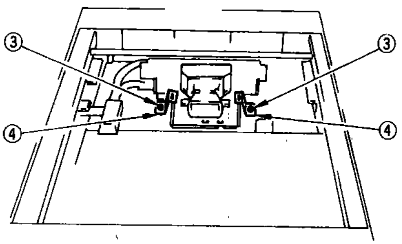


Figure 4-408

6) Lift the CCD unit, and disconnect the two connectors (J2001, J2003).

5. Detaching the Laser Scanner Cover

1) Disconnect the power plug.
2) Remove the copyboard glass.
3) Remove the lens mount cover.
4) Remove the four screws ①, and remove the laser scanner cover ②.

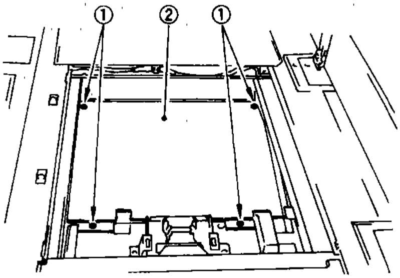


Figure 4-409

Caution:
Move the mirror mount fully to the left.
Take care not to damage the power line ③ of the scanning lamp.

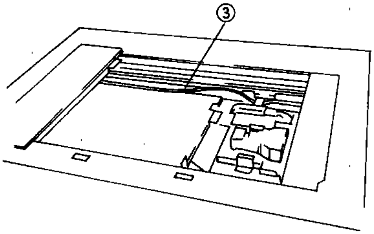


Figure 4-410

Cut-out at the Front
Remove in the direction of the arrow.

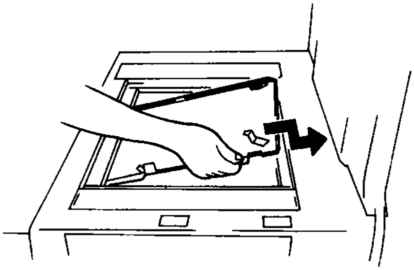


Figure 4-411

B. Pre-Exposure Lamp

1. Detaching the Pre-Exposure Lamp

1) Put down the photosensitive drum.
2) Disconnect the connector ①, and remove the screw ②; then, remove the pre-exposure lamp unit.

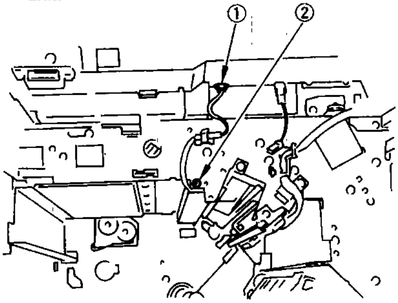


Figure 4-412

V. CHARGING SYSTEM

A. Photosensitive Drum Assembly

1. Construction

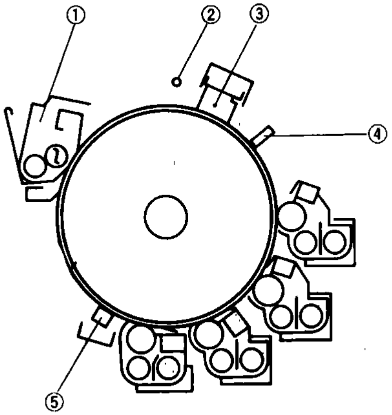


Figure 4-501

① Photosensitive drum cleaner
② Pre-exposure lamp
③ Primary corona assembly
④ Potential sensor
⑤ Black toner density sensor

2. Detaching the Photosensitive Drum

1) Turn off the power switch, and disconnect the power plug from the outlet.
2) Open the front door (left, right), and remove the two screws ①; then, remove the two hopper unit stopper fixings.

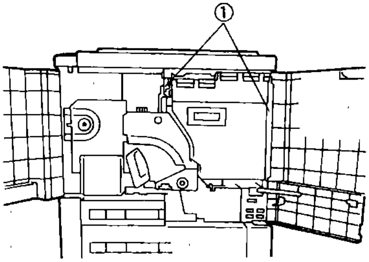


Figure 4-502

3) Open the hopper unit fully.
4) Remove the transfer drum rotating knob, and remove the transfer assembly cover.
5) Disconnect the connector ②, and remove the screw ③; then, slide out the primary corona assembly.

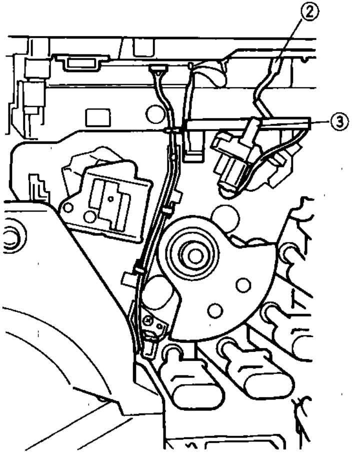


Figure 4-503

6) Loosen the screw ④, and turn the releasing lever ⑤ clockwise until it stops; then, tighten the screw ④, and disengage the cleaning blade from the photosensitive drum.

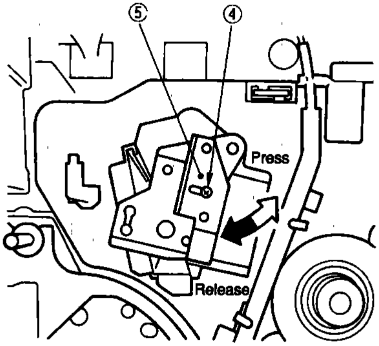


Figure 4-504

Caution:
Whenever installing the photosensitive drum cleaner unit, be sure to shift the blade releasing lever counterclockwise (locking position) and fix it securely in place with a screw.
Further, you must not engage the blade releasing lever (ON) after removing the cleaning unit.

7) Remove the screw ⑥; then, slide the cleaning unit ⑦ slightly out, and tilt it to the left; then, slide it fully out to the front.

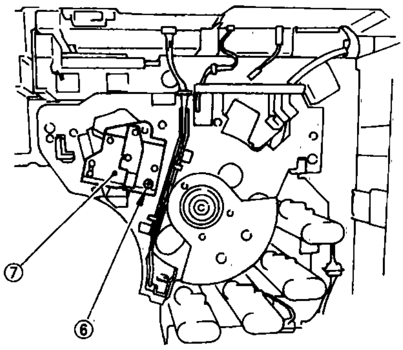


Figure 4-505

8) Remove the screw ⑧, and disconnect the connector ⑨; then, remove the pre-photosensitive drum cleaner paper sensor ⑩.

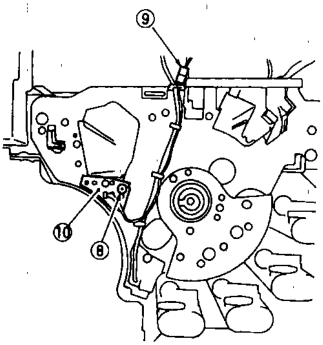


Figure 4-506

Caution:
When inserting the pre-photosensitive drum cleaner into the copier, be sure to guide it straight along the rail so as to avoid damage to the photosensitive drum.

9) Disconnect the connector ⑫ of the black toner density sensor unit ⑪, and remove the screw ⑬; then, remove the black toner density sensor.

10) Remove the screw ⑭, and remove the photosensitive drum fixing spacer ⑮.

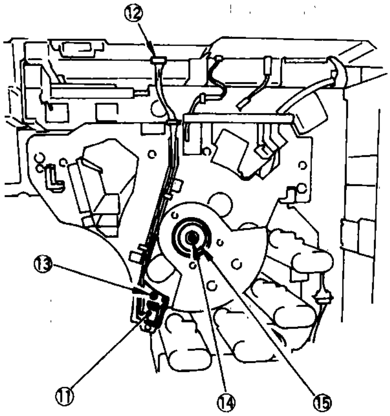


Figure 4-507

11) Remove the three screws ⑯, and loosen the two fixing pins ⑰; then, slide out the photosensitive drum frame unit ⑱.

Caution:
When sliding out the photosensitive drum, take extra care to avoid damage; if resistance is felt at the front, lift it slightly. Make sure that the transfer assembly frame is inside the copier.

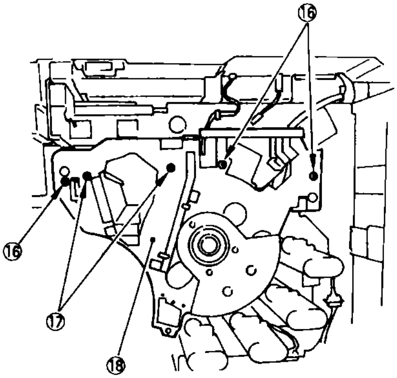


Figure 4-508

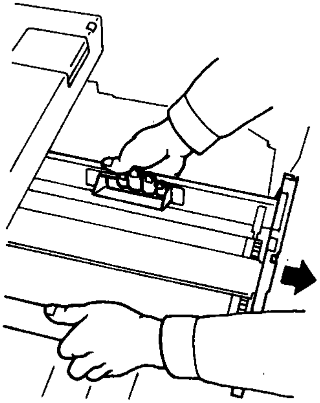


Figure 4-509

12) Hold the grip, and place it as shown in Figure 4-510.

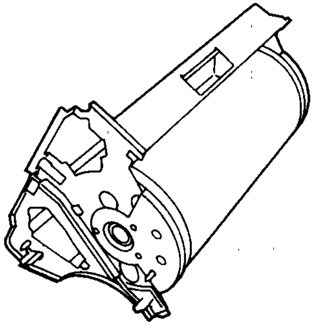


Figure 4-510

13) Remove the three screws ⑲, and remove the photosensitive drum block (front) ⑳.
14) Remove the three screws ㉑, and remove the photosensitive drum block (rear) ㉒.

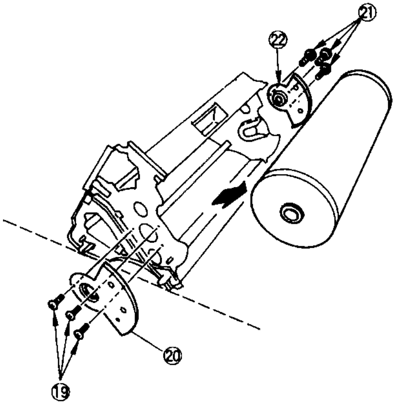


Figure 4-511

15) Slide out the photosensitive drum unit with care.

Reference:

Slide out the photosensitive drum unit as shown in Figures 4-512 and -513.

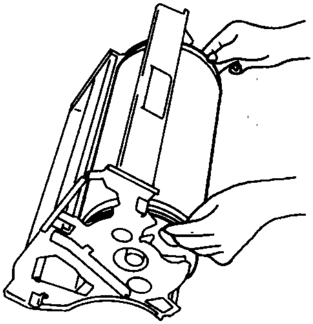


Figure 4-512

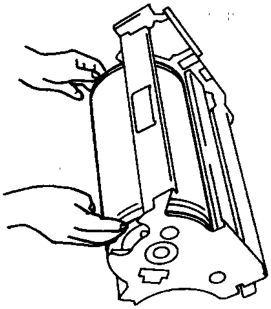


Figure 4-513

Caution:

The photosensitive drum is highly susceptible to light; if exposed to strong light for a long period of time, it may generate white spots or black band. Put the light-blocking sheet (or copy paper) around it and place it in a dark place whenever it has been removed from the copier.

16) Place the photosensitive drum unit with the drum heater friction plate at the bottom.

17) Remove the two screws ㉓, and remove the photosensitive drum flange (front) ㉔.

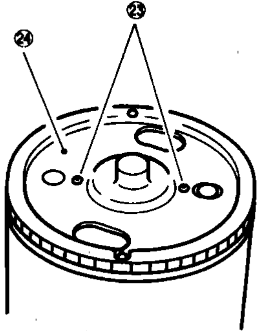


Figure 4-514

18) If the drum heater is installed, disconnect the connector ㉕, and pull out the drum heater ㉖.

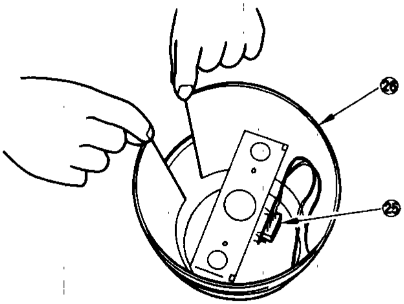


Figure 4-515

Reference:

The drum may recover to a degree that does not affect the copy quality if kept in a dark place for 24 hours after exposure to light of 600 lux; however, avoid exposing it to direct rays of the sun, which are as strong as 10,000 to 30,000 lux.

19) Lift the photosensitive drum carefully as shown in Figure 4-516.

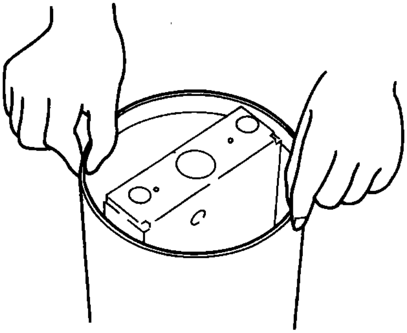


Figure 4-516

3. Cleaning the Photosensitive Drum

If the surface of the photosensitive drum is soiled, wipe it with a flannel cloth coated with toner; do not use paper, lint-free or otherwise.

Caution:
Do not dry wipe or do not use solvent; never use drum cleaning powder.

4. Replacing the Black Toner Density Sensor

1) Open the front right door.
2) Open the hopper.
3) Disconnect the connector, and remove the screw; then, remove the black toner density sensor unit.
4) Remove the two screws ①, and remove the black toner density sensor; then, disconnect the connector.

Caution:
Do not loosen any other screws than those shown, or the sensor will become displaced.

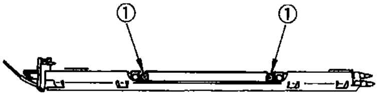


Figure 4-517

5. Detaching the Photosensitive Drum Cleaner Unit

1) Open the front door (left, right), and remove the screw; then, remove the hopper unit stopper fixing.
2) Open the hopper unit fully.
3) Loosen the screw, and turn the releasing lever ② clockwise until it stops; then, tighten the screw ①, and disengage the cleaning blade from the photosensitive drum.

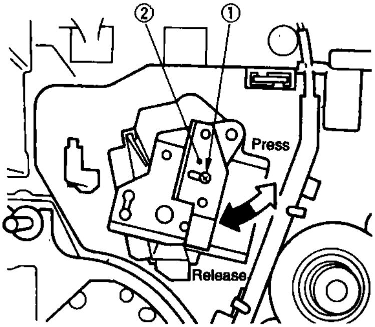


Figure 4-518

4) Remove the screw ④; then, slide the cleaning unit slightly out, and tilt it to the left; then, slide it fully out.

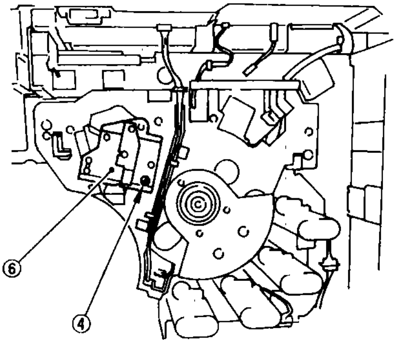


Figure 4-519

Caution:
Whenever installing the photosensitive drum cleaner unit, be sure to shift the blade releasing lever counterclockwise (locking position) and fix it securely in place with a screw.

Caution:
When inserting the photosensitive drum cleaner unit into the copier, be sure to guide it straight along the rail so as to avoid derailing it.
You must not engage the blade releasing lever (ON) after removing the cleaning unit.

6. Replacing the Photosensitive Drum Cleaner Blade

1) Remove the photosensitive drum cleaner unit.
2) Remove the two screws ①, and remove the photosensitive drum cleaner unit upper cover ②.

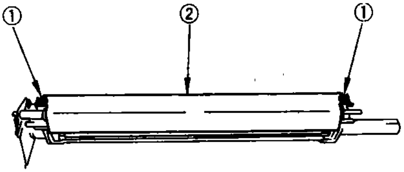


Figure 4-520

3) Remove the five screws ③, and remove the photosensitive unit cleaner blade.

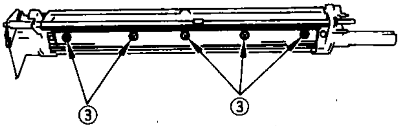


Figure 4-521

7. Replacing the No. 2 Blade

1) Open the front right door.
2) Open the hopper unit.
3) Disconnect the connector, and remove the screw; then, remove the black toner density sensor unit.
4) Remove the two screws ① of the No. 2 blade (front, rear); then, remove the No. 2 blade ②.

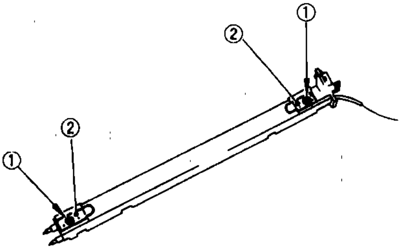


Figure 4-522

8. Replacing the Photosensitive Drum Scoop-Up Sheet

1) Remove the photosensitive drum cleaner unit.
2) Remove the three screws ①, and remove the photosensitive drum cleaner lower scraper ②.

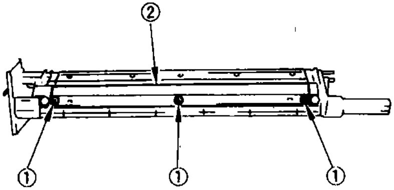


Figure 4-523

9. Detaching the Photosensitive Drum Cleaner End Seal (upper, lower)

1) Remove the photosensitive drum cleaner unit.
2) Remove the two screws ①, and remove the photosensitive drum cleaner unit upper cover ② when detaching the end seal (upper).

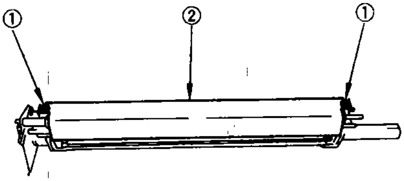


Figure 4-524

3) Remove the screws ③ to remove the end seal ④.

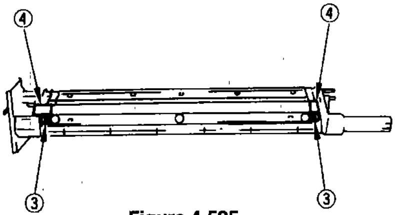


Figure 4-525

B. Corona Assemblies

1. Outline

The copier uses four corona assemblies, and corona wires of 0.06 mm in diameter are used.

The grid wire of the primary corona assembly is gold-plated and has a diameter of 0.1 mm.

2. Replacing the Wire Cleaning Pad of the Primary Corona Assembly

1) Remove the primary corona assembly.
2) Remove the two screws ①, and remove the shielding plate ②.

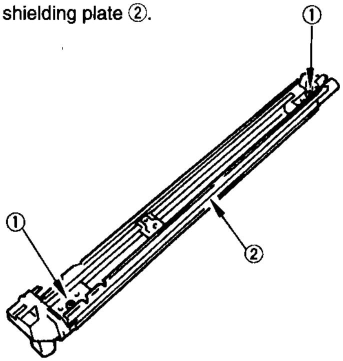


Figure 4-526

3) Remove the cleaning pad ③.

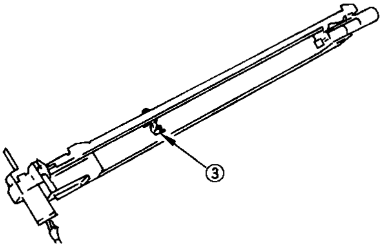


Figure 4-527

Caution:

Go through the following for cleaning and inspecting the primary corona assembly:

- Make thorough checks on the block (front, rear) for melting by leakage, deformation by heat, cracks and discoloration.
  If a fault is found, immediately replace it with a new part.
- When inspecting and cleaning the block (front, rear), be sure not to leave out the inside.
- Do NOT use a cloth carrying metal particles.
- Do NOT use a moist cloth. Instead, use lint-free paper to dry wipe it and then use alcohol. (Make sure that the part has completely dried before installing it back into the machine.)
- Make sure that the machine is serviced on a periodical basis and all periodically replaced parts are replaced on a periodical basis.

VI. DEVELOPING SYSTEM

A. Developing Assembly

1. Construction

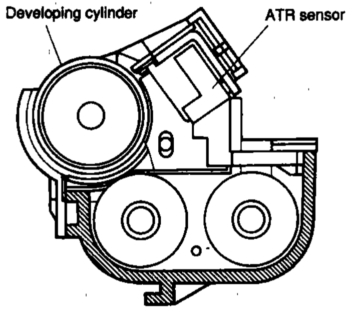


Figure 4-601

2. Removing the Y/M/C Developing Assembly

1) Open the front door.
2) Remove the screw, and remove the hopper stopper plate; then, full open the hopper.
3) Remove the screw ① of each of the developing assemblies, and disconnect the connector ②; then, remove the developing assembly with care.

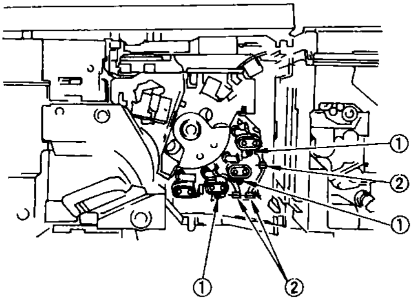


Figure 4-602

3. Removing the Bk Developing Assembly

1) Open the front door.
2) Remove the screw, and remove the hopper stopper plate; then, open the hopper fully.
3) Remove the screw of each of the developing assemblies, and remove the developing blade cover.

> **Caution:**
> If you have disconnected the connector when removing and installing the developing assembly, be sure to clean the inside of the ATR sensor connector.

4. Removing the ATR Sensor of the Y/M/C Developing Assembly

1) Remove the Y/M/C developing.
2) Remove the screw ①, and remove the developing blade cover ② by sliding it to the left.

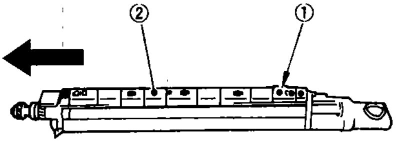


Figure 4-603

3) Remove the four screws ③, and disconnect the connector ④; then, remove the developing blade unit.

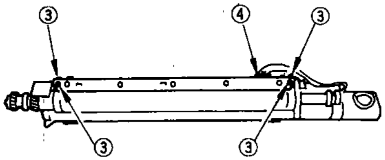


Figure 4-604

4) Remove the three screws ⑤, and remove the ATR sensor ⑥.

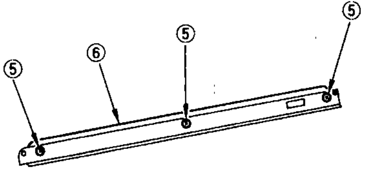


Figure 4-605

5. Removing the Developing Cylinder

1) Remove the Y/M/C developing assembly.
2) Remove the screw ①, and remove the developing blade cover ②.

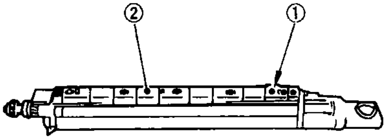


Figure 4-606

3) Remove the four screws ③, and disconnect the connector ④; then, remove the blade unit.

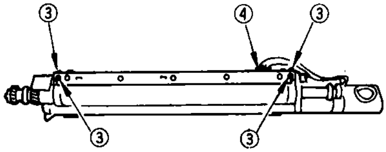
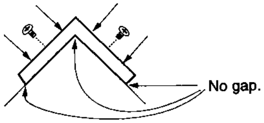


Figure 4-607

Caution:
To assemble, force the developing blade unit down as shown, and screw it in place.



4) Remove the three screws ⑤, and remove the developing assembly lower cover ⑥.

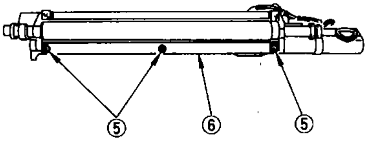


Figure 4-608

5) Remove the resin screw ⑦ from the front of the developing assembly, and remove the electrode plate cover ⑧.

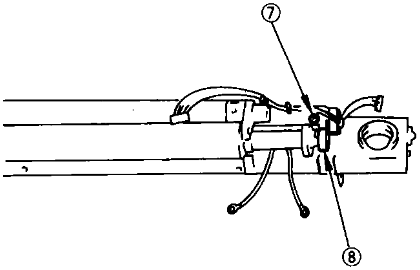


Figure 4-609

6) Remove the two screws ⑨, and remove the electrode ⑩ of the developing cylinder.

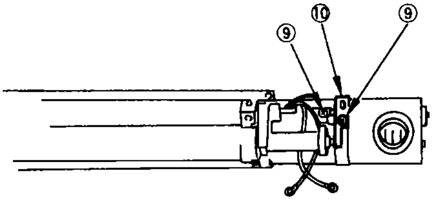


Figure 4-610

7) Remove the grip ring ⑪, bearing ⑫, and spacer ⑬.

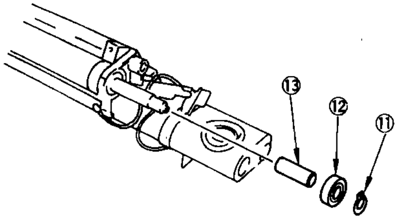


Figure 4-611

Caution:
During assembly, be sure to create a gap of 0.2±0.1 mm between the bearing ⑫ and the grip ring.

8) Remove the two E-rings ⑭, grip ring ⑮, three gears ⑯, spacer ⑰, and sleave slider ⑱ from the rear of the developing assembly.

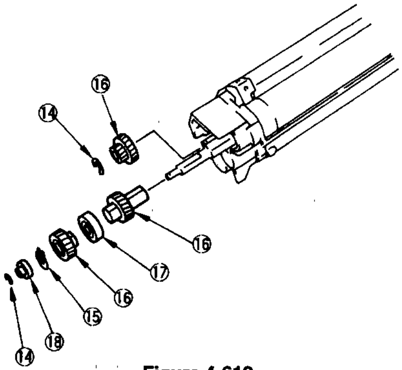


Figure 4-612

Caution:
During assembly, check to make sure that there is no gap between the gear ⑯ and the grip ring ⑮.

9) Push the bearings ⑲ on both ends of the developing cylinder toward the outside, and pull out the cylinder ⑳.

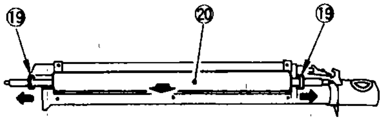


Figure 4-613

Caution:
Force the sleeve in the direction of Y while butting the bearing against the wall X1 of the case; then, install the grip ring Z. (Make sure there is no gap.)
Thereafter, butt the bearing on the opposite side against the wall X2 of the case; then, install the grip ring so that the gap between the grip ring and the roll is 0.2 ±0.1 mm.

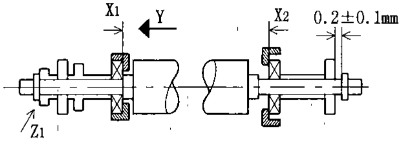


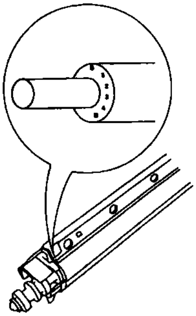
Figure 4-614

Caution:
If poor contact is noted between the developing assembly drive unit and the developing assembly high-voltage supply unit, or a development fault caused by such poor contact, replace the sleeve slider ⑱ (Figure 4-612) with a new part as shown in "XI Others" in Chapter 4.

Caution:
The developing cylinders are not compatible since the polarity orientation differs from one cylinder to another (color). Identify the correct developing cylinder by the color marking on the edge of its shaft.

The developing sleeve for cyan comes in two types, identified by the lot number marking found on its end. (See Figure 4-615.)

To avoid adjustment of the S-B gap at time of replacing the sleeve for cyan, use a sleeve obtained from the manufacturer that produced the one already in the developing assembly.



Lot No. : B5234B
Manufacturer's marking
(B: Company B, M: Company M)
Lot No.

Figure 4-615

If you have replaced the developing blade, make adjustments using the appropriate service tool (FY9-3015); see Table 4-601 for the S-B gap of each sleeve.

Developer color	S-B gap
Yellow	0.70mm
Cyan (Company B)	0.70mm
Cyan (Company M)	0.92mm
Magenta	0.70mm
Black	0.90mm

Table 4-601

Adjusting the S-B Gap

Put two gauges of the appropriate color (service tool FY9-3015-000) between the developing blade and the sleeve, and fix the developing blade in place.

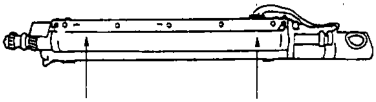


Figure 4-616

Caution:
If the developing assembly is inserted at an angle, its gear at the rear can damage the photosensitive drum.
Be sure to insert it along the rail while holding it straight so that the gear will not come into contact with the drum.

Caution:
When inserting the black developing assembly, be sure that it will not override the rail.

B. Hopper Assembly

1. Opening the Hopper

1) Open the front door.
2) Remove the screw ①, and remove the hopper stopper plate; then, open the hopper fully.

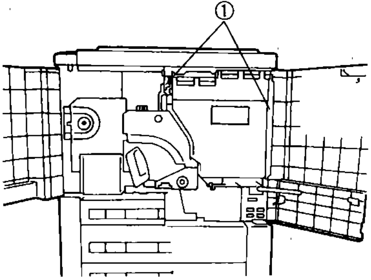


Figure 4-617

2. Removing the Hopper Unit

1) Open the hopper.
2) Disconnect the three connectors from the bottom of the hopper unit.

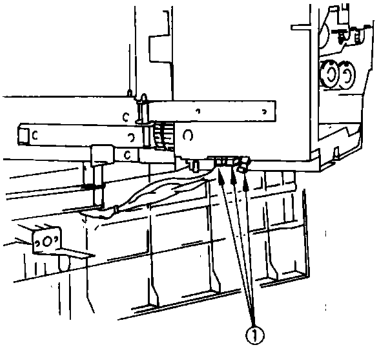


Figure 4-618

3) Hold the hopper unit as shown in Figure 4-619, and lift it.

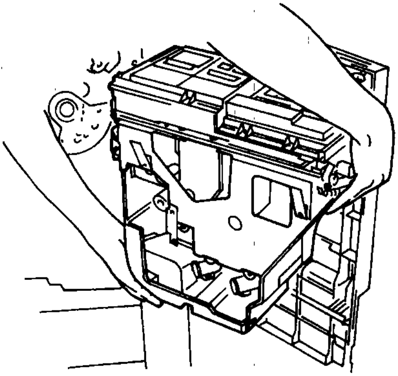


Figure 4-619

3. Removing the Hopper Motor

1) Remove the hopper unit.
2) Remove the two screws ①, and remove the hopper cover ②.

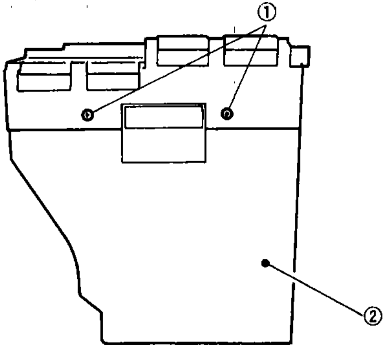


Figure 4-620

3) Remove the grip ring ③, and remove the gear ④.

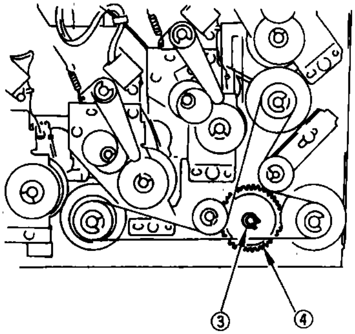


Figure 4-621

4) Remove the screw ⑤, and remove the toner receptacle ⑥.

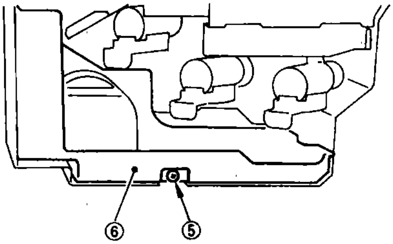


Figure 4-622

Caution:
If the hopper motor fails to turn on or off, the transistor on the DC controller PCB may be damaged.
Be sure to replace the DC controller PCB as necessary.

5) Disconnect the connector ⑦, and remove the two screws ⑧; then, remove the hopper motor ⑨.

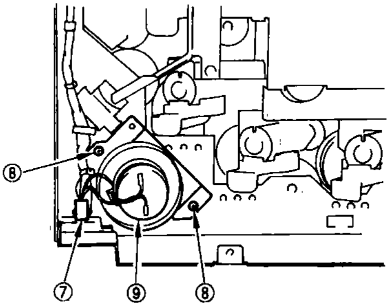


Figure 4-623

4-1. Removing the Toner Supply Clutch (TYPE 1)

1) Install the toner stopper to the toner supply mouth, and remove the hopper unit; then, remove the hopper cover.

For Black Toner

2) Remove the E-ring ① and bushing ② on the toner supply mouth side.

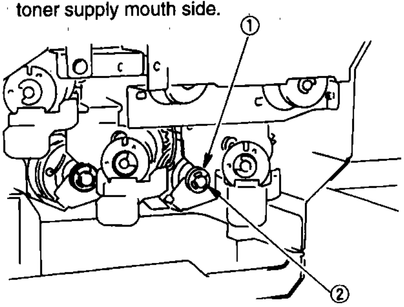


Figure 4-624

3) Remove the two E-rings ③ on the hopper drive side, and remove the lever ④ and spring ⑤.

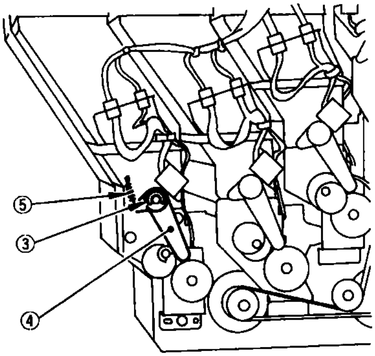


Figure 4-625

4) Disconnect the connector ⑥, and remove the E-ring ⑦ and gear ⑧ (pay attention to the parallel gear) equipped with a cam; then, remove the three screws ⑨, and remove the gear unit ⑩.

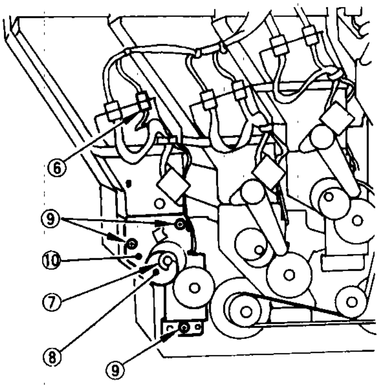


Figure 4-626

5) Remove the two E-rings ⑪, and remove the two gears ⑫; then, remove the toner supply clutch.

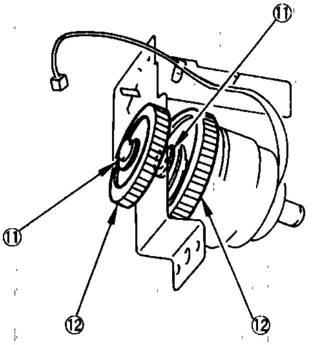


Figure 4-627

4-2. Removing the Toner Supply Clutch (TYPE 2)

The discussions that follow are based on the black hopper.

1) Remove the hopper unit, and remove the hopper cover.
2) Remove the six screws ①, and remove the hopper upper cover ②.

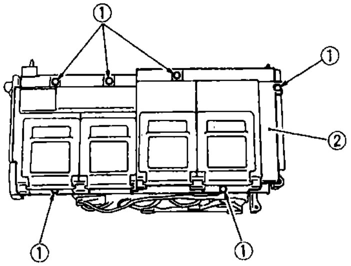


Figure 4-628

3) Remove the two screws ③, and remove the reinforcing plate ④.

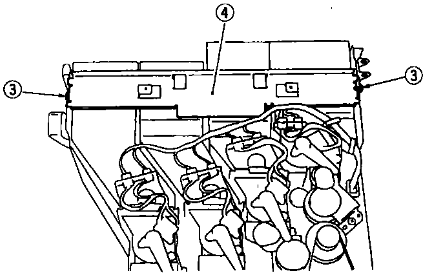


Figure 4-629

4) Remove the screw ⑤, and disconnect the two connectors ⑥; then, remove the black hopper.

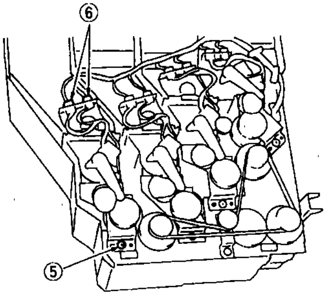


Figure 4-630

5) Remove the E-ring, bar, spring, E-ring, gear with a cam (pay attention to the parallel gear), two-E-rings, and two gears from the hopper drive assembly; then, remove the clutch.

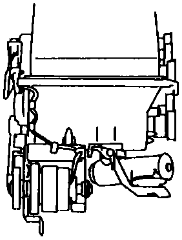


Figure 4-631

VII. FIXING SYSTEM

A. Fixing Assembly

1. Detaching the Fixing Assembly

1) Open the front door.
2) Remove the transfer assembly frame cover and fixing assembly cover.
3) Slide out the transfer assembly frame.
4) Hold the grip at the front and the pin at the rear of the fixing assembly, and lift the assembly to remove.

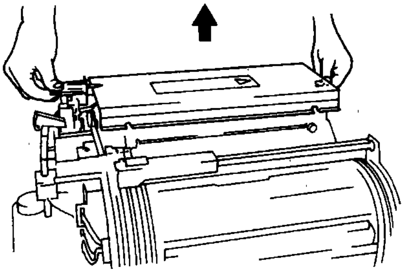


Figure 4-701

2. Opening the Upper Fixing Roller Unit

1) Open the front left door.
2) Remove the transfer assembly frame cover and fixing cover.
3) Slide out the transfer assembly frame.
4) Remove the two screws, and remove the upper fixing cover.
5) Open the inside delivery (fixing/delivery assembly), and remove the two screws ①; then, remove the upper fixing roller unit ②.

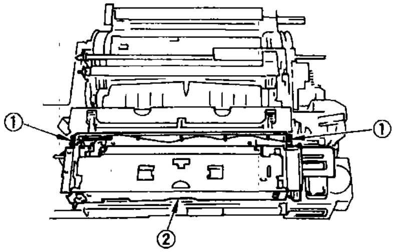


Figure 4-702

3. Removing the Upper Fixing Heater

1) Open the front door.
2) Remove the transfer assembly frame cover and fixing cover.
3) Slide out the transfer assembly frame.
4) Pull out the faston ① from the rear of the upper fixing heater.

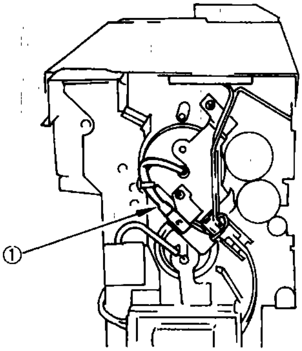


Figure 4-703

5) Pull out the faston ② from the front of the upper fixing heater; then, remove the screw ③ and metal fixing ④.

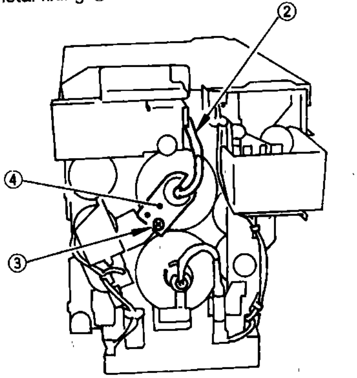


Figure 4-704

6) Pull out the upper fixing heater toward the front.

4. Detaching the Upper Fixing Roller

1) Open the front door.
2) Remove the transfer frame cover and fixing cover.
3) Slide out the transfer frame.
4) Remove the upper fixing heater.
5) Remove the upper fixing roller metal fixing ① (each from front and rear).

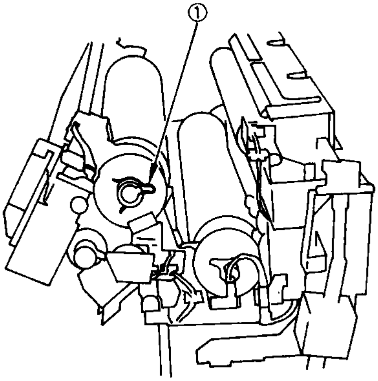


Figure 4-705

6) Move the bearing ② at the upper fixing roller, and pull out the upper fixing roller ③ as shown in Figure 4-706.

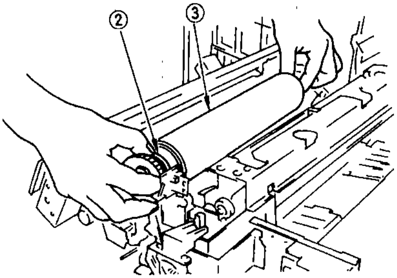


Figure 4-706

5. Detaching the Lower Fixing Heater

1) Open the front door.
2) Remove the transfer assembly frame cover and fixing cover.
3) Pull out the transfer assembly frame.
4) Pull out the faston ① at the rear of the lower fixing heater.

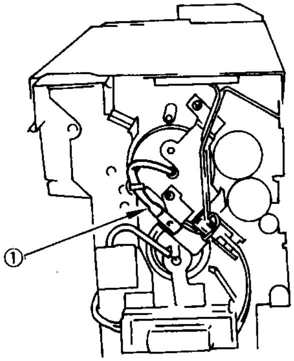


Figure 4-707

5) Pull out the faston ② at the front of the lower fixing heater; then, remove the screw ③ and metal fixing ④.

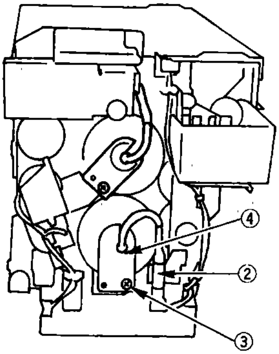


Figure 4-708

6) Pull out the lower fixing heater toward the front.

6. Removing the Lower Fixing Roller

1) Open the front door.
2) Remove the transfer frame cover and fixing cover.
3) Slide out the transfer assembly frame.
4) Put down the fixing assembly unit.
5) Remove the screw ①, and slide the fixing assembly inlet guide ② toward the rear to remove.

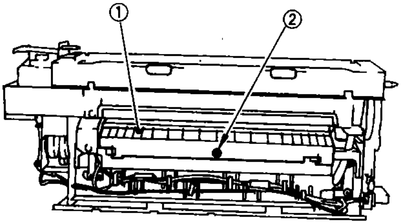


Figure 4-709

6) Remove the lower fixing heater.
7) Open the upper fixing roller unit.
8) Remove the lower fixing roller metal fixing ③ (each from front and rear).

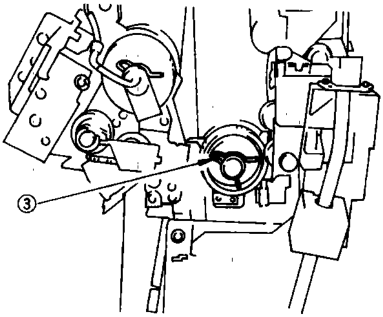


Figure 4-710

9) Remove the screw ④, and remove the lower fixing roller static eliminator brush ⑤.

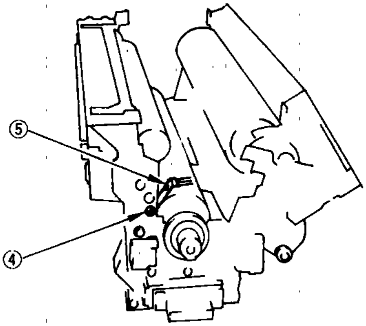


Figure 4-711

10) Move the bearing at the rear of the lower fixing roller, and pull out the lower fixing roller as shown in Figure 4-712.

Caution:
When attaching the roller, take care not to damage it by hitting the thermistor.

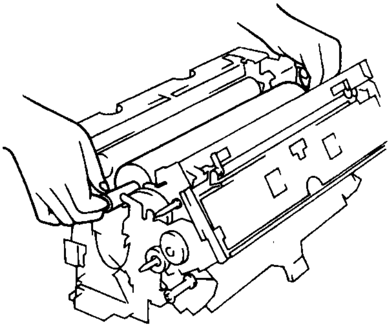


Figure 4-712

7. Identifying the Lower and Upper Fixing Rollers (front, rear)

- The end of the lower fixing roller is equipped with a collar.
- The upper fixing roller does not have a collar, but has a cut-off at the front and rear.
- The side with Teflon tape or PFA tube must be at the rear.

8. Removing the Fixing Assembly Thermistor (upper, lower)

1) Open the front left door.
2) Slide out the transfer assembly frame.
3) Put down the fixing assembly unit.
4) Remove the screw ①, and disconnect the connector ② (front); then, remove the upper fixing assembly thermistor.

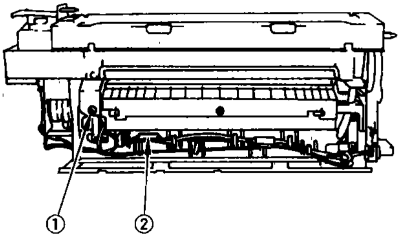


Figure 4-713

5) Remove the screw ③, and disconnect the connector ④ (rear); then, remove the lower fixing assembly thermistor.

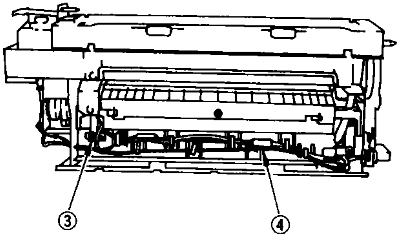


Figure 4-714

9. Detaching the Fixing Assembly Thermal Switch (lower)

1) Open the front left door.
2) Slide out the transfer assembly frame.
3) Put down the fixing assembly unit.
4) Remove the screw ①, and remove the lower fixing thermal switch ② together with its mount.

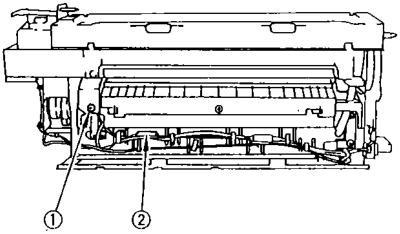


Figure 4-715

5) Detach the lower fixing thermal switch from the mount.

10. Removing the Fixing Thermal Switch (upper)

1) Open the front left door.
2) Slide out the transfer assembly frame.
3) Remove the two screws, and remove the upper fixing assembly.
4) Remove the cleaning belt unit.
5) Remove the screw, and remove the thermistor together with its mount.
6) Pull out the two fastons ①.

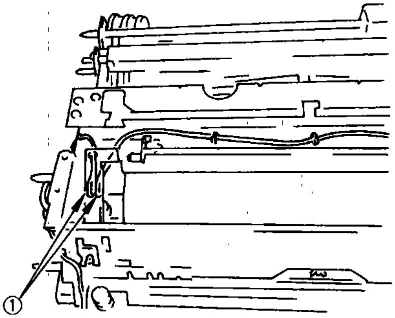


Figure 4-716

11. Adjusting the Fixing Nip

1) Execute 'NIP-CHK' of 'FUSER' under 'FUNC' in service mode.

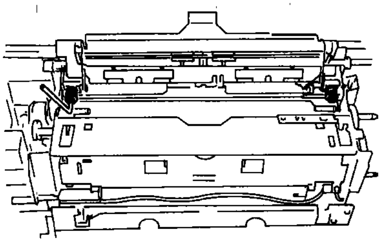


Figure 4-717

2) If the nip pressure is not as indicated, adjust it using the adjusting nut.

B. Fixing Assembly Cleaner

1. Detaching Cleaning Belt

1) Open the front left door.
2) Slide out the transfer assembly frame.
3) Remove the two screws, and remove the fixing assembly upper cover.
4) Remove the two cleaning belt pressure springs ①.

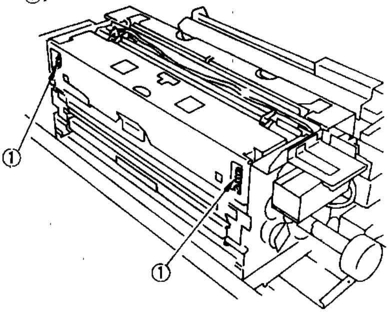


Figure 4-718

5) Insert a metal ruler or flat-blade screwdriver into the stop plate ② to release force to the fixing assembly cleaning belt.

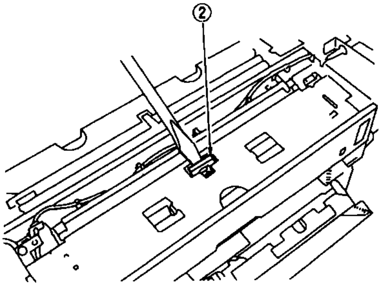


Figure 4-719

6) Remove the screw ③, and remove the hinge of the cleaning belt unit; then, remove the cleaning belt unit.

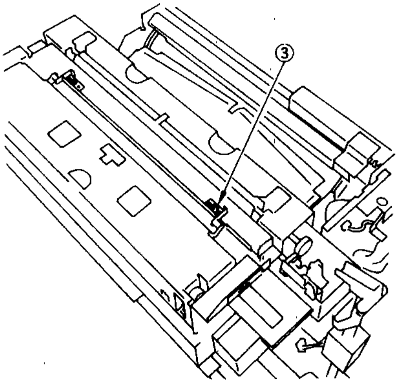


Figure 4-720

7) Remove the two screws ④, and remove the two bushings ⑤; then, remove the cleaning belt.

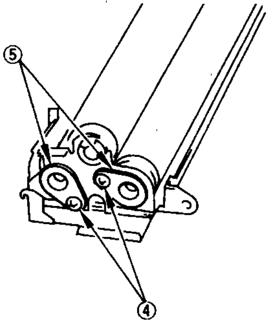


Figure 4-721

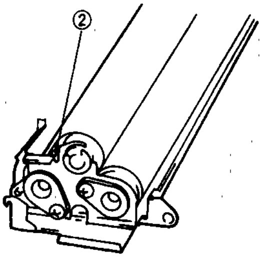
2. Attaching the Cleaning Belt

The service parts for the cleaning belt consist of the feeding shaft, take-up shaft, and belt integrated as a single entity.

Install the component parts as in detaching them but only in reverse; keep the following in mind.

1) Wind the belt two to three times around the take-up shaft.
2) After attaching the belt, put the detecting portion ② of the length detecting lever ① in the belt; then, remove the slack.

Caution:
The cleaning belt can become slack if the upper roller unit has been opened and is closed after maintenance.
Operate the cleaning belt drive unit 10 to 20 times by hand after finishing maintenance work to remove the slack.



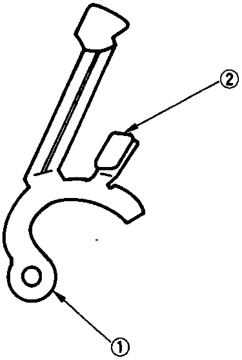


Figure 4-722

C. Fixing Oil Applying Assembly/Removing Assembly

1. Detaching the Oil Applying Roller Unit

1) Open the front door.
2) Remove the transfer assembly frame cover and fixing assembly cover.
3) Slide out the transfer assembly frame.
4) Remove the fixing assembly upper cover, and open the upper fixing roller unit.
5) Remove the four screws ①, and remove the oil applying roller unit ②.

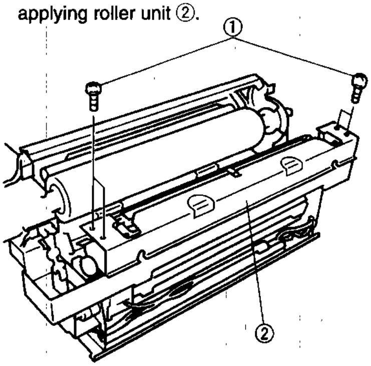


Figure 4-723

2. Detaching the Oil Applying Roller Blade

1) Open the front door.
2) Remove the transfer assembly frame cover and fixing cover.
3) Slide out the transfer assembly frame.
4) Open the upper fixing roller unit.
5) Fully open the oil applying roller blade unit ①, and pull it out.

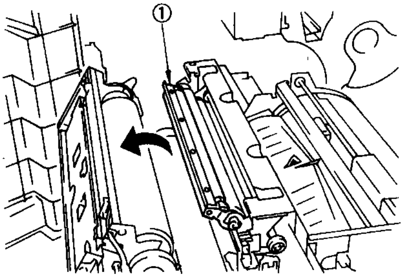


Figure 4-724

6) Remove the four screws ②, and remove the oil applying roller blade.

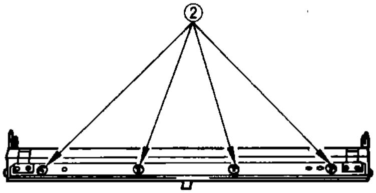


Figure 4-725

3. Detaching the Oil Applying Roller

1) Open the front door.
2) Remove the transfer assembly frame cover and fixing cover.
3) Slide out the transfer assembly frame.
4) Remove the upper fixing assembly cover.
5) Open the upper fixing roller unit.
6) Remove the oil applying roller blade.
7) Remove the two E-rings ① (one each from front and rear), remove the two bushings ② (one each from front and rear), and remove the gear ③ from the rear. (Take care not to let the parallel pin ④ slip off the gear.)

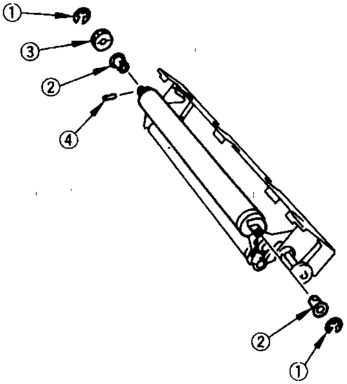


Figure 4-726

4. Detaching the Oil Removing Blade

1) Open the front left door.
2) Slide out the transfer assembly frame.
3) Put down the fixing assembly unit.
4) Open the upper fixing roller unit.
5) Remove the two screws ①, and pull out the oil removing blade ②.

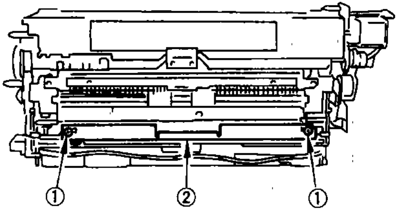


Figure 4-727

Caution:
Install the oil removing blade so that the ID marking (white, indelible ink) is toward the blade mount.
Otherwise, it may not properly remove oil or can wear out the lower fixing roller fast.

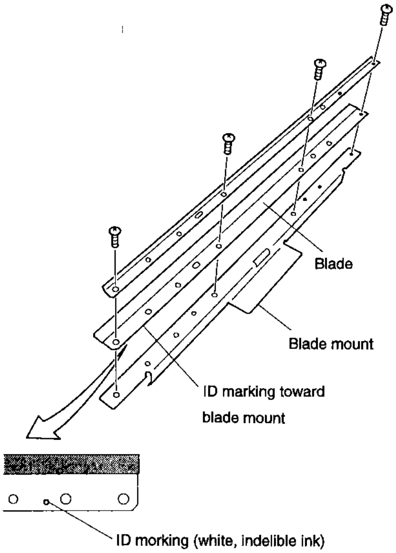


Figure 4-728

D. Internal Delivery Assembly

1. Detaching the Fixing Assembly Separation Claw

1) Open the front door.
2) Remove the fixing cover.
3) Remove the two screws ①, and remove the separation claw metal fixing ②.
4) Remove the four fixing separation claws.

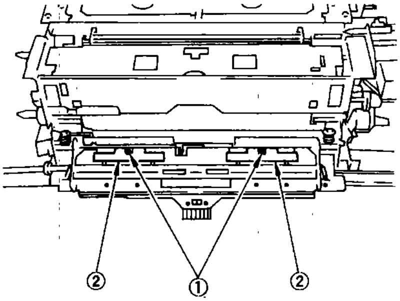


Figure 4-729

Caution:
Be sure to replace the claw spring at the same time.

VIII. DUPLEXING UNIT

A. Pick-Up Assembly

1. Removing the Pick-Up Roller

1) Remove the duplexing unit pick-up assembly.
2) Remove the E-ring ① (made of resin), and pull out the pick-up roller ② together with its collar.

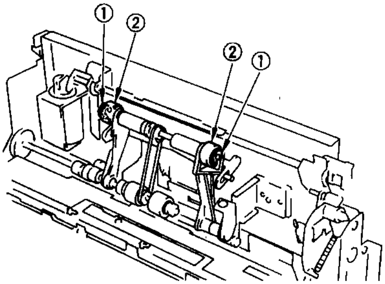


Figure 4-801

Caution:

a. When attaching the pick-up roller ① to the pick-up assembly, make sure that the side with a round marking ② on the rubber portion is toward the copier's front.

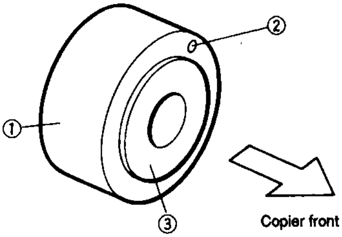


Figure 4-802

The pick-up rollers are identified by color ③ as follows:
brass for the front
silver for the rear
Make sure the correct rollers are used.

b. Do not remove the rubber portion of the pick-up roller from the collar.

2. Removing the Feeding Roller 1

1) Remove the duplexing unit pick-up assembly.
2) Remove the screw ①, and remove the pick-up roller arm bushing ②.
3) Remove the E-ring ③ (made of resin).

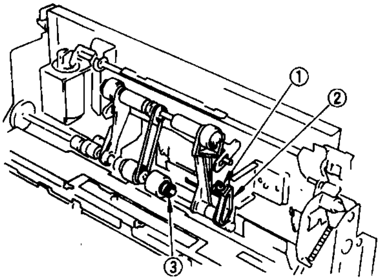


Figure 4-803

4) Pull out the feeding roller ⑤ together with the belt ④.

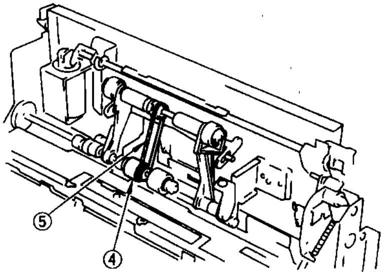


Figure 4-804

Caution:
When attaching the feeding roller ① to the pick-up assembly, make sure that the gear ② installed to the feeding roller is toward the copier's rear.

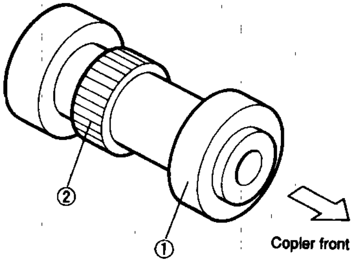


Figure 4-805

3. Detaching the Feeding Roller 2

1) Remove the duplexing unit pick-up assembly.
2) Remove the two screws ①, and remove the duplexing unit pick-up assembly internal guide ②.

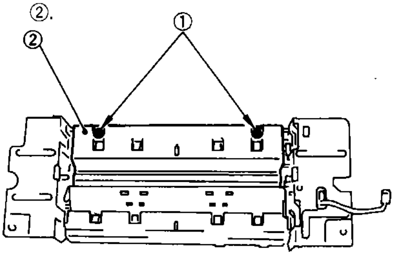


Figure 4-806

3) Remove the two E-rings ③ (made of resin).

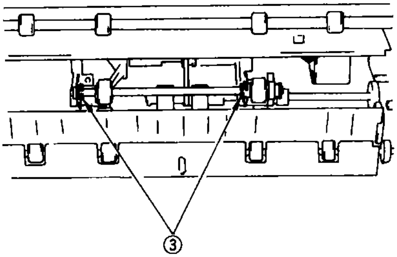


Figure 4-807

4) Shift the two feeding roller 2 bushings ④ toward the inside, and remove them together with the shaft ⑤.

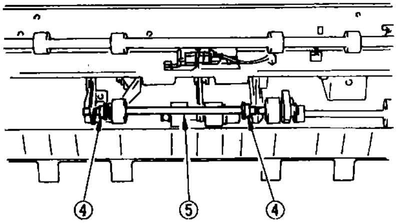


Figure 4-808

5) Remove the two E-rings ⑥ (made of resin) and gear ⑦; then, remove the feeding roller 2 from the shaft.

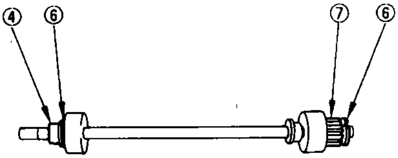


Figure 4-809

Caution:
The gear ⑦ is fixed to the feeding roller 2 shaft with a parallel pin; take care not to drop the pin when detaching and attaching the gear.

4. Detaching the Separation Roller

1) Remove the duplexing unit pick-up assembly.
2) Remove the screw ②, and remove the separation roller cover ①.

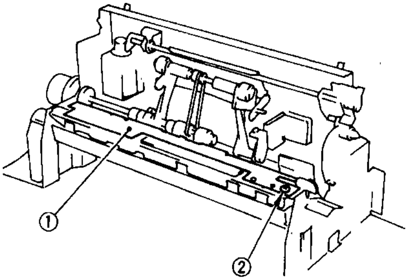


Figure 4-810

3) Remove the screw ④, and remove the separation roller unit ③.

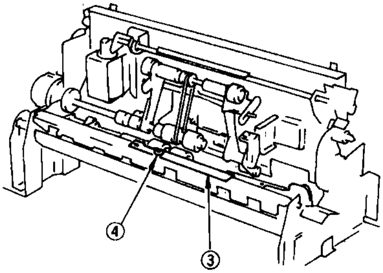


Figure 4-811

4) Remove the two E-rings ⑤ (made of resin).
5) Pull out the separation roller shaft ⑥, and remove the separation roller ⑦.

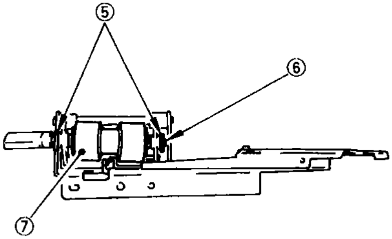


Figure 4-812

Caution:
When attaching the separation roller ① to the pick-up assembly, make sure that the D-shaped cut-out is toward the front.

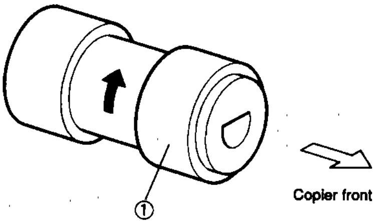


Figure 4-813

5. Positioning the Pick-Up Roller Releasing Solenoid (SL21)

1) Remove the duplexing unit pick-up assembly.
2) Place the duplexing unit pick-up assembly as shown in Figure 4-814, and hold the lever ① so that the pick-up roller ② drops on its own.
3) Adjust the pick-up roller releasing solenoid (SL21) so that the length L is 65 ±1 mm.

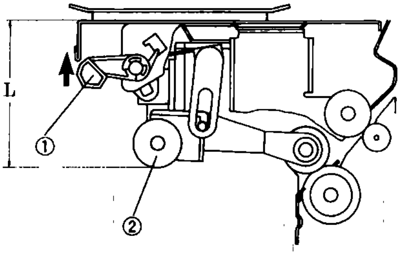


Figure 4-814

B. Feeding Assembly

1. Removing the Duplexing Unit

1) Slide out the cassettes 3 and 4.
2) Remove the lower right cover.
3) Open the pick-up door and duplexing reversing assembly door.
4) Remove the two screws ①, and remove the two stopper plates ②.

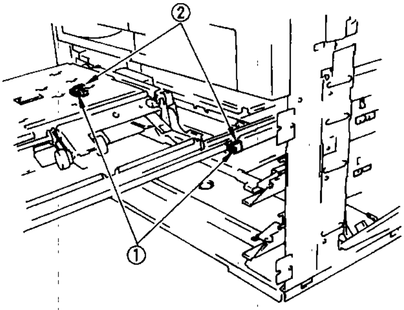


Figure 4-815

5) Slide out the duplexing unit.

2. Removing the Feeding Roller

1) Remove the duplexing unit.
2) Remove the two grip rings ①, and remove the feeding roller ③ from the roller shaft ②.

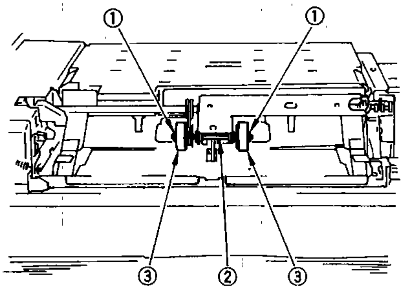


Figure 4-816

3. Removing the Curl Pressing Sheet

1) Remove the duplexing unit.
2) While lifting the duplexing feeding assembly ①, remove the six screws ②, and remove the six curl pressing sheets ③.

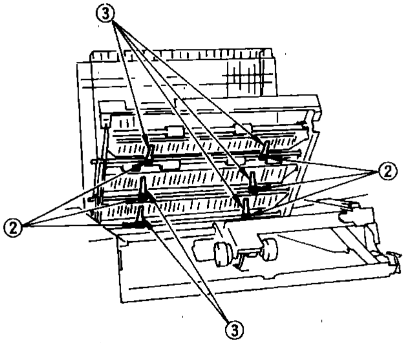


Figure 4-817

3) Remove the two screws ④, and remove the remaining two curl pressing sheets ⑤.

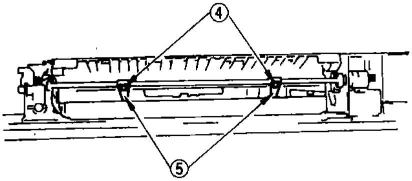


Figure 4-818

Caution:
Do not touch the portion where the gear (pulley) fixed to the shaft of the decurling sheet and the belt engage with each other; the parts are engaged with high accuracy.

4. Detaching the Duplexing Stacking Assembly Heater

1) Remove the duplexing unit.
2) Remove the four screws ①, and remove the front cover ②.

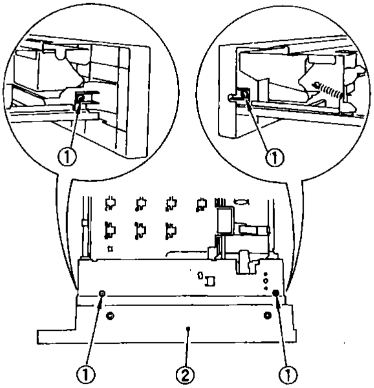


Figure 4-819

3) Remove the screw ③, and remove the spring ④; then, remove the grip ⑤.

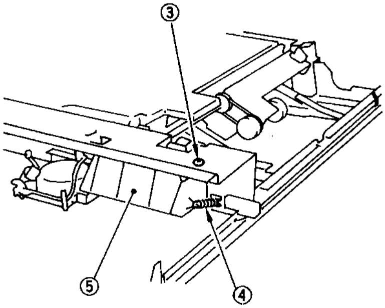


Figure 4-820

4) Remove the E-ring ⑥, and remove the bushing ⑦.

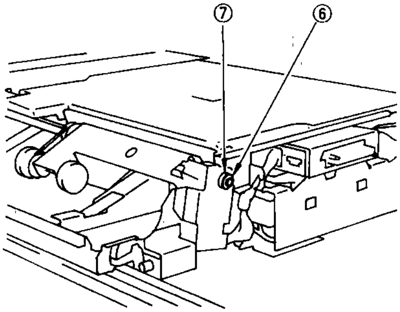


Figure 4-821

5) Remove the feeding roller drive belt ⑧ from the gear, and pull out the feeding roller shaft ⑨ from the front.

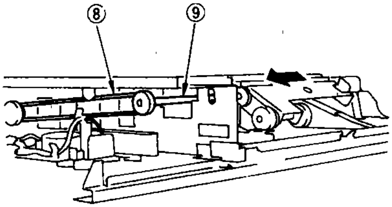


Figure 4-822

6) Remove the two screws ⑩ used to hold the paper jogging guide in place.

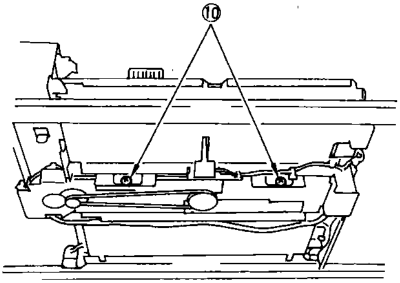


Figure 4-823

7) Remove the four screws ⑫ used to hold the heater base plate ⑪.

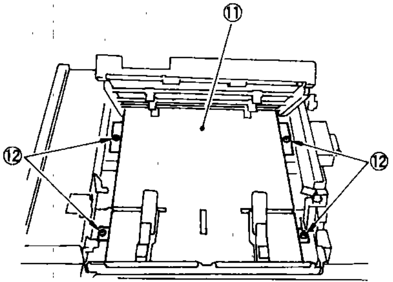


Figure 4-824

8) Hold up the edge of the heater base plate ⑬, and pull out the mount together with the two paper jogging guides ⑭ in the direction of the arrow.

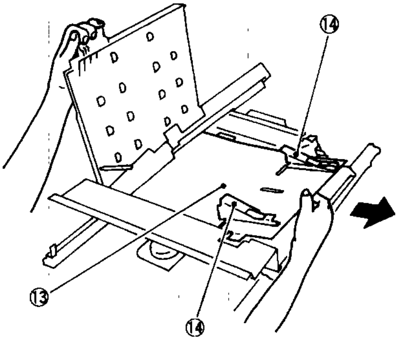


Figure 4-825

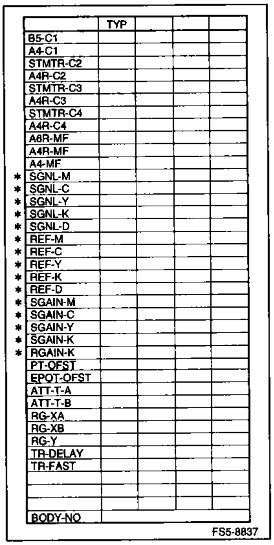
IX. ELECTRICAL SYSTEM

1. Replacing the DC Controller PCB

Execute 'BACK UP' in service mode before replacing the PCB.

1) Remove the rear over.
2) Remove the eight screws, disconnect the connector.
3) After replacing the DC controller PCB, go through the following:

- Replace the developer (all four colors), and execute 'STIR-4' and 'INIT-4' under 'FUNC → INSTALL'.
  Record the results on the service label (those indicated by * in Figure 4-901). However, for 'SGNL-K', enter a value obtained by adding '37' to the result.
- Enter the values recorded on the service value (only those not indicated by * in Figure 4-901) in 'FUNC → D-CON'. However, for 'SGNL-K', add a value obtained by adding '37' once again.
- When you have entered all values for each screen, press 'SEND'.
- Set 'PASCAL' of 'ADJUST → PASCAL' to '1'.
- When you have finished entering all values, turn off and then on the power switch.



		TYP			
	B5-C1				
	A4-C1				
	STMTR-C2				
	A4R-C2				
	STMTR-C3				
	A4R-C3				
	STMTR-C4				
	A4R-C4				
	A6R-MF				
	A4R-MF				
	A4-MF				
*	SGNL-M				
*	SGNL-C				
*	SGNL-Y				
*	SGNL-K				
*	SGNL-D				
*	REF-M				
*	REF-C				
*	REF-Y				
*	REF-K				
*	REF-D				
*	SGAIN-M				
*	SGAIN-C				
*	SGAIN-Y				
*	SGAIN-K				
*	RGAIN-K				
	PT-OFST				
	EPOT-OFST				
	ATT-T-A				
	ATT-T-B				
	RG-XA				
	RG-XB				
	RG-Y				
	TR-DELAY				
	TR-FAST				
	BODY-NO				

FS5-8837

Figure 4-901

2. Detaching the Image Processor PCB (IP-MAIN/IP-ED/IP-IF/IP-ECO)

1) Remove the upper delivery assembly cover.
2) Remove the two screws ①, and remove the image processor PCB cover.

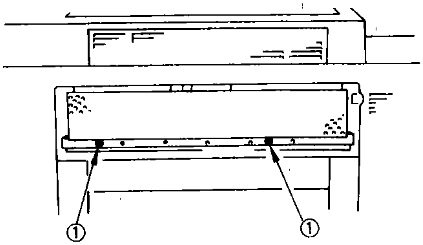


Figure 4-902

3) (Only if the IP-ED or IP-IF PCB installed; skip the step if you are detaching the IP-ECO.) Remove the two screws ②, and remove the interface harness retainer.

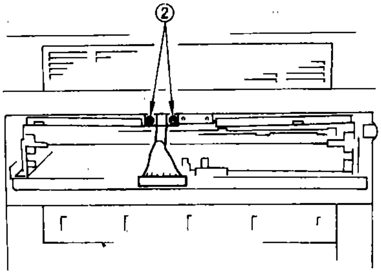


Figure 4-903

4) Remove the two screws from both ends of the PCB you are removing; then, shift up the levers on both ends, and pull out the image processor PCB.

3. Replacing the Analog Processor PCB

1) Remove the copyboard glass, and remove the lens mount cover.
2) Remove the laser scanner cover.
3) Remove the two screws ①, and remove the IP upper cover ②; then, disconnect the connector ③, from the IP motherboard.

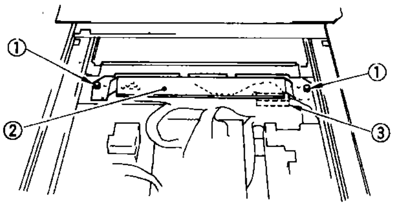


Figure 4-904

4) Remove the harness cover ④, remove the two screws ⑤, and disconnect the three connectors ⑥ (J2501, J2503, J2504); then, remove the analog processor PCB ⑦.

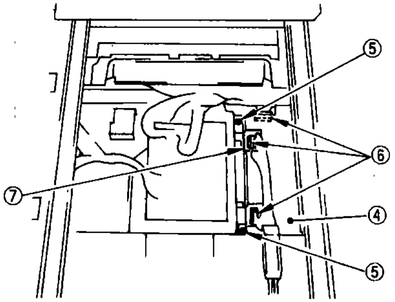


Figure 4-905

Caution:
Take care not to trap the flat cable of the image processor PCB between the base plate and the analog processor PCB.

4. Replacing the Reader Controller PCB

1) Remove the reader controller PCB cover and upper right cover.
2) Remove the three screws ①, and remove the reader controller cooling fan stay ②.

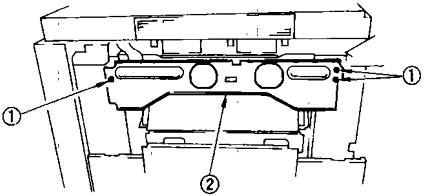


Figure 4-906

3) Disconnect the seven connectors ③, and remove the six screws ④; then, remove the reader controller PCB ⑤.

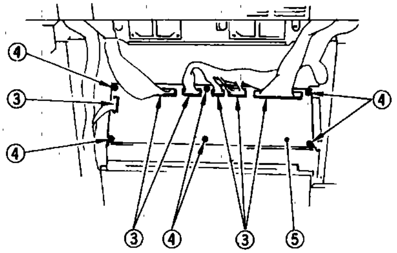


Figure 4-907

4) After replacing the reader controller PCB, go through the following:

- Enter the values recorded in the service label (indicated by * in Figure 4-908) by executing 'R-CON' under 'FUNC' in service mode.
- Execute AUTO-ADJ' of 'CCD' under 'FUNC'; record the results (indicated by * in Figure 4-908) on the service label.
- If a projector is installed, execute 'FUNC → PRJ-ADJ → PRJ-CCD' in service mode.
- When you have finished entering all values, turn off and then on the power switch.

	TYP		
CVR-TYPE			
ADJ-X			
ADJ-Y			
ADJ-S			
ED-ADJ-X			
ED-ADJ-Y			
ADJ-J			
EC-GLASS			
DA-XS			
DA-XE			
DA-YS			
DA-YE			
DS-DOC			
DS-PRJ			
DS-OHP			
ADJ-M			
ADJ-C			
ADJ-Y			
ADJ-K			

	TYP		
OFST-M			
OFST-C			
OFST-Y			
OFST-K			
SEG-ADJ			
BC-ADJ			
LGCR-IPU			
* LAMP-DT			
* GAIN-B			
* GAIN-G			
* GAIN-R			
* TARGET-B			
* TARGET-G			
* TARGET-R			

Figure 4-908

5. Detaching the HVT PCB

1) Remove the rear cover.
2) Disconnect the seven high-voltage connectors ① from the HVT PCB.
3) Disconnect the three connectors ② (J1, J2, J3).
4) Disconnect the connector, and remove the three screws ③; then, remove the HVT PCB ④.

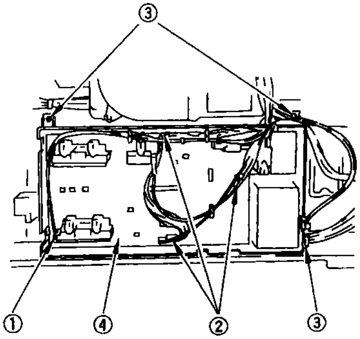


Figure 4-909

6. Detaching the Developing Bias PCB

1) Remove the rear cover.
2) Remove the HVT PCB.
3) Disconnect the two connectors ①, and remove the two screws ②; then, remove the developing bias PCB together with the PCB case.

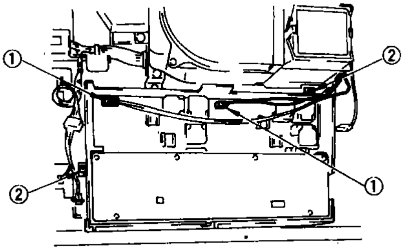


Figure 4-910

7. Detaching the Scanner Motor Driver PCB

1) Remove the copyboard glass and the lens mount cover.
2) Remove the laser scanner cover.
3) Disconnect the three connectors ① (J01, J02, J03), and remove the two screws ②; then, remove the scanner motor driver PCB ③.

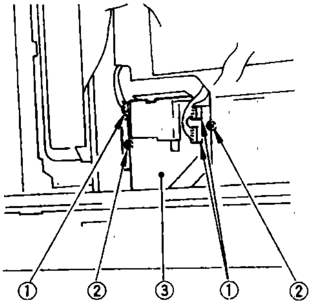


Figure 4-911

8. Detaching the Laser Scanner Motor Controller PCB

1) Disconnect the power plug.
2) Remove the copyboard glass and the lens mount cover.
3) Remove the four screws ①, and remove the laser scanner cover ②.
4) Remove the scanner motor driver.

Caution:
Move the mirror mount fully to the left. Moreover, take care not to damage the power line ③ of the scanning lamp.

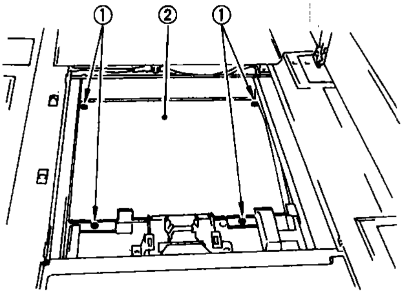


Figure 4-912

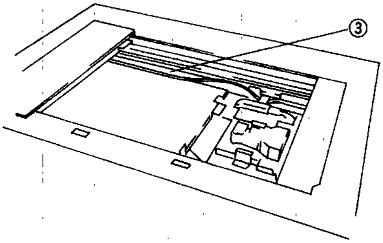


Figure 4-913

Cut-out at the Front

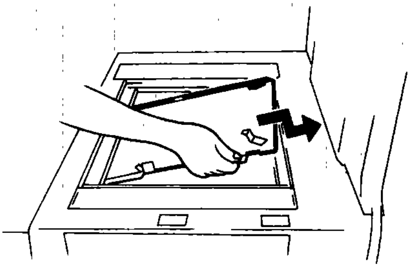


Figure 4-914

5) Disconnect the six connectors ③, and remove the nine screws ④; then, remove the laser scanner motor unit ⑤.

Caution:
The laser scanner motor driver PCB is located under the scanner rail (front). Work with care noting the presence of the PCB and the harness found on the left of the laser scanner motor unit.

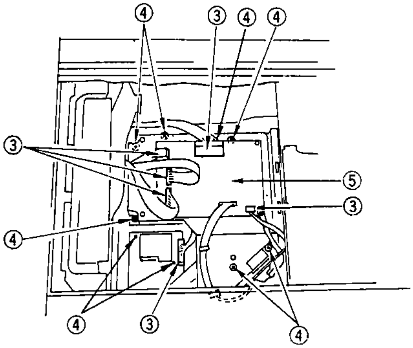


Figure 4-915

6) Open the harness retainer, disconnect the connectors ⑥ (J951, J952) on the laser driver PCB, and remove the four binding screws ⑦; then, remove the laser scanner motor controller PCB.

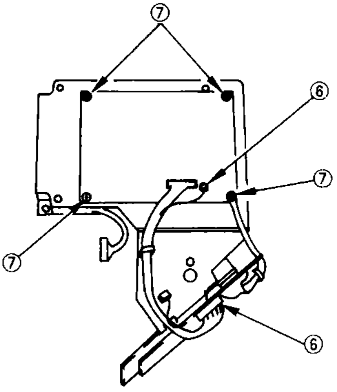


Figure 4-916

Caution:
When replacing the laser scanner unit, hold it on its metal plates and mold members, while *avoiding contact with the laser scanner controller PCB, laser scanner drive PCB, and the lens assembly.* In addition, when replacing the laser scanner controller PCB, do NOT touch any of its elements.

9. Detaching the Main Motor Driver PCB

1) Remove the rear cover.
2) Remove the four screws ①, and disconnect the four connectors ②; then, remove the main motor driver PCB ③.

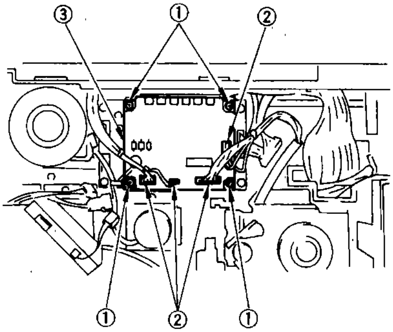


Figure 4-917

10. Detaching the Scanner Motor Driver PCB

1) Remove the main motor driver PCB, and remove the rear cover.
2) Remove the main motor driver PCB, remove the four screws ①, and disconnect the three connectors ②; then, remove the scanner motor driver PCB ③.

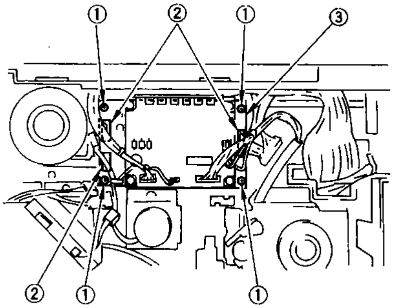


Figure 4-918

X. EDITOR

1. Removing the Editor Controller PCB

1) Remove the six face stickers ① used to hide screws.

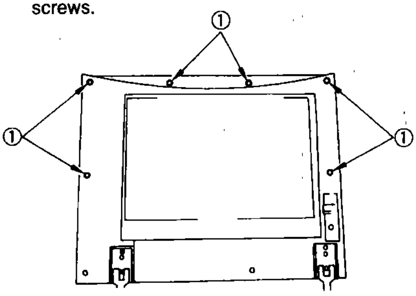


Figure 4-1001

2) Remove the two M8x8 screws, six M8x10 screws, and six M8x23 screws, 14 in total; then, remove the copyboard cover.
3) Remove the two screws ②, and remove the controller PCB cover ③.

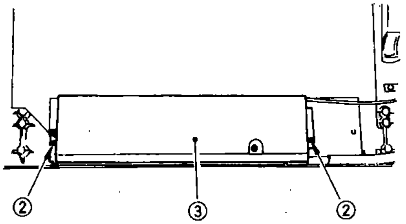


Figure 4-1002

4) Disconnect the two connectors ④, and remove the four screws ⑤; then, remove the flat cable ⑥, and remove the editor controller PCB ⑦.

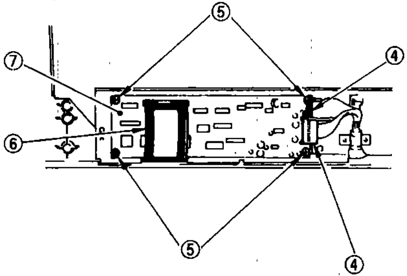


Figure 4-1003

Caution:
When attaching the controller PCB, make sure switches ① and ② are correctly positioned by referring to the settings noted on the cable.

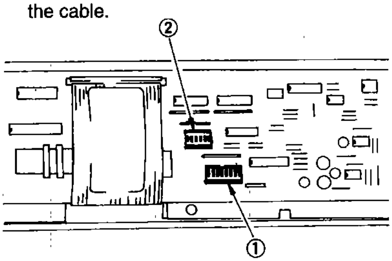


Figure 4-1004

2. Detaching the Editor Mirror

1) Remove the six stickers used to hide screws.
2) Remove the two M8x8 screws, six M8x10 screws, and six M8x23 screws, 14 in total; then, remove the copyboard cover.
3) Remove the two screws, and remove the controller PCB cover.
4) Remove the flat cable ①, and remove the five screws ②; then, remove the controller PCB support plate ③.
5) Remove the mirror plate ④.

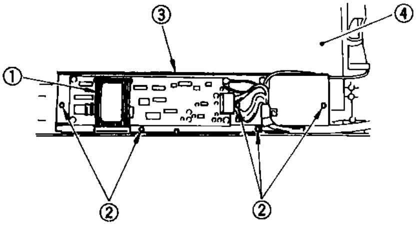


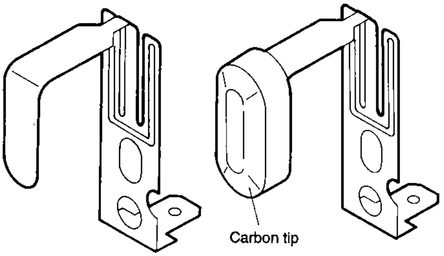
Figure 4-1005

XI. OTHERS

A. Developing Drive Assembly/Developing Assembly

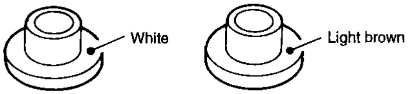
Go through the steps shown below if poor contact, or development faults caused by such contact, is noted between the developing assembly drive unit and the high-voltage supply unit.

If the parts indicated are old types, replace them with new types.



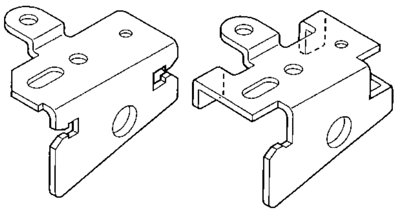
(old, FB2-0337-020) (new, FF5-4065-000)

Figure 4-1101 Developing Drive Unit Electrode



(old, FB2-0305-000) (new, FB3-7681-000)

Figure 4-1102 Developing sleeve Slider



(old, FB2-0370-000) (new, FB2-0370-020)

Figure 4-1103 Developing Assembly Fixing Plate

1. Replacing the Developing Drive Unit Electrode

Before starting the following work, be sure to disconnect the power plug.

1) Remove the developing assembly drive unit from the copier.
2) Remove one screw each, and remove the developing drive unit electrode.

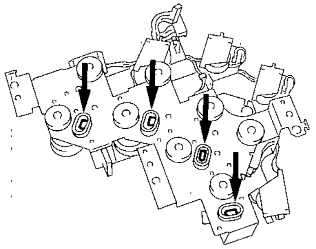


Figure 4-1104

3) Remove the conducting grease sticking to the inner side of the connector housing with a cotton wad moistened with alcohol.

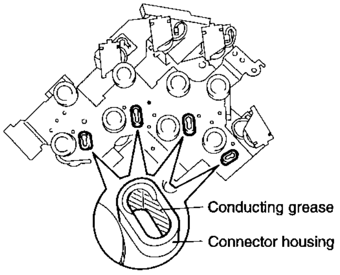


Figure 4-1105

4) Install the new electrode to the developing drive unit.
5) Install the developing drive unit to the copier, and assemble all the parts you have removed.

2. Replacing the Sleeve Slider

Before starting the following work, be sure to disconnect the power plug.

1) Open the front door and open the hopper unit.
2) Remove the screw, and remove the developing assembly.
3) If conducting grease is found at the rear of the developing sleeve, remove it with a cotton wad moistened with alcohol.

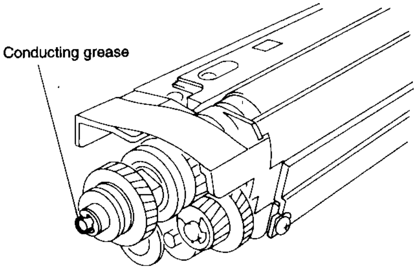


Figure 4-1106

4) Remove the E-ring, and replace the sleeve slider at the rear of the developing sleeve.

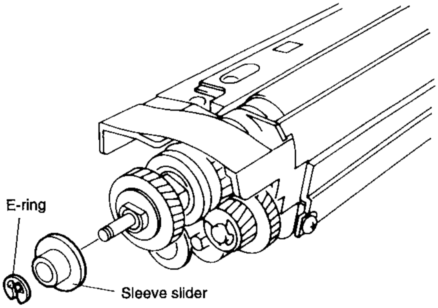


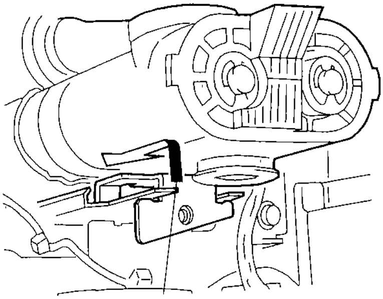
Figure 4-1107

5) Install the developing assembly.

3. Inserting the Developing Assembly (revised steps)

The shape of the developing assembly fixing plate (Figure 4-1103) has been changed to prevent improper installation.

In the new fool-proof method, the developing assembly is now forced to stop once and then inserted farther to the rear.



Lift the developing assembly, and slide it to the rear.

Figure 4-1108

B. Photosensitive Drum Cleaner Paper Sensor

1. If the photosensitive drum cleaner paper sensor unit is inserted into the machine while twisting it to the right, the mold on the sensor can damage the photosensitive drum.
   The new part is made available to prevent such damage.

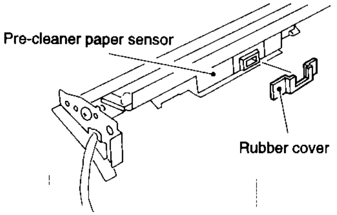


Figure 4-1109

2. If the photosensitive drum cleaner paper sensor unit is inserted into the machine at an angle, the edge of the metal plate can damage the photosensitive drum.
   The edge portion has been modified as shown in Figure 4-1110 to prevent such damage.

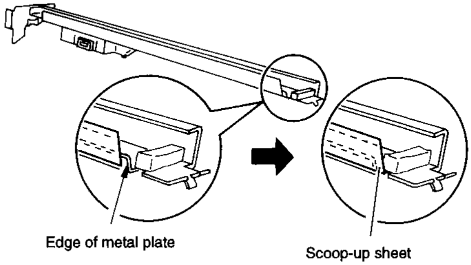


Figure 4-1110

C. Scanner Assembly

1. Removing the Laser Assembly

1) Remove the laser scanner assembly.
2) As shown, remove the laser assembly from the laser scanner unit (3 screws, 2 connectors, 1 locking support)

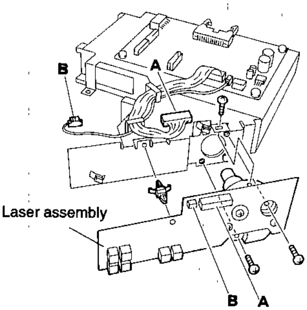


Figure 4-1111

Caution:
When handling the laser assembly, hold it as shown and avoid touching the elements on the driver PCB.
In particular, do not touch the foot of the laser; otherwise, the laser can be permanently damaged by static electricity.

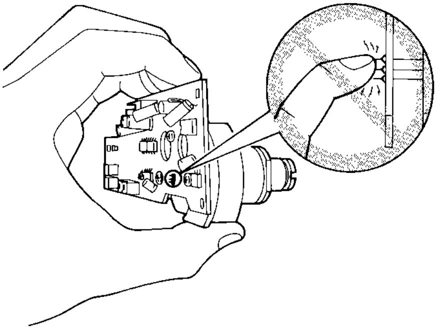


Figure 4-1112

D. Transfer Drum Unit

If the transfer drum separation claw becomes soiled with toner, the images on copies or the back of copies (center in feeding direction) can become soilde.

If such a problem is noted, or when replacing the transfer sheet, add a guide plate to the transfer sheet push-up solenoid to change the stroke of the solenoid.

1) Remove the transfer drum from the copier.
2) Peel off the transfer sheet from the trasfer drum.
3) With the separation claw plate (upper) kept down, remove the two screws, and remove the transfer push-up solenoid.

Caution:
At this time, the screwdriver will not be perpendicular to the screw head; be sure to turn it carefully. (You need not remove the harness of the solenoid.

4) Remove the tension spring, and remove the plunger (core) of the solenoid.

5) After removing the plunger, install the solenoid to the trasfer drum.
6) Install the new spring so that its side with the smaller hook diameter is toward the push-up lever.

Caution:
Take care not to deform the hook portion of the tension spring when removing and installing it.

7) With the pin fitted inside the plunger in the hole of the guide plate, put the plunger into the solenoid. (At this time, the plunger is oriented 180° opposite its initial orientation.)
8) Fix the guide plate to the solenoid with two screws (M3x4).
9) Hook the tension spring on the pin position of the plunger.
10) Attach the transfer sheet to the transfer drum, and put the transfer drum back in the copier.

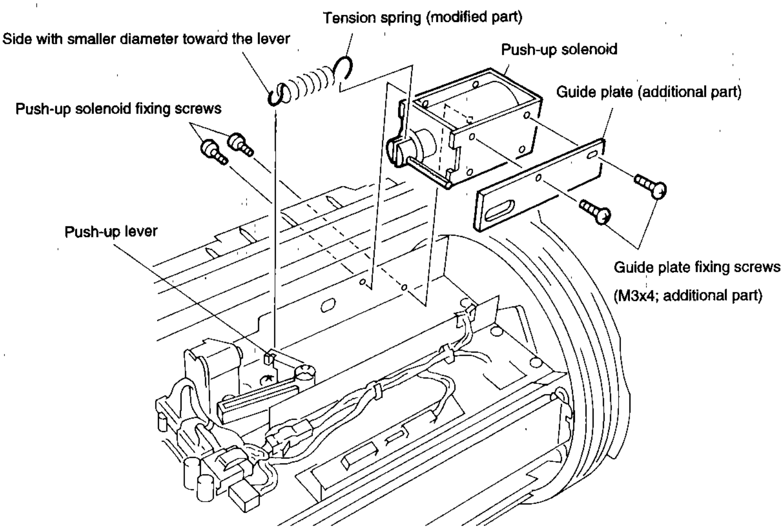

Tension spring (modified part)
Side with smaller diameter toward the lever
Push-up solenoid
Guide plate (additional part)
Push-up solenoid fixing screws
Push-up lever
Guide plate fixing screws
(M3x4; additional part)

Figure 4-1113

Caution:
A serial number of each transfer drum unit is indicated on the white label attached to the rear of the transfer drum in 6 digits; the measures being discussed have already been implemented in drum units with No. 227502 or later.

E. Removing /Replacing the Spring Clutch

Caution:
Some spring clutches are paint-locked. Remove the glue before starting the work.

1. Duplexing Unit Spring Clutch

1) Open the lower door on the left and the right, and slide out the duplexing unit.
2) Loosen the hex screw with a hex key, and remove the spring clutch.

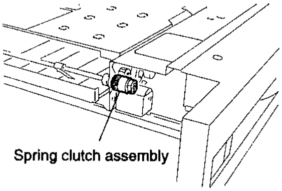


Figure 4-1114

3) Clean the shaft on which the spring clutch assembly was found with alcohol.
4) Loosen the hex screw on the new spring clutch.
5) Fit the shaft and the D-cut of the spring clutch boss, and engage the new spring clutch assembly and the shaft.
6) Put a transparency cut to an appropriate width between the spring clutch and the E-ring, and tighten the hex screw while butting the spring clutch against the E-ring.

2. Registration Roller Releasing Spring Clutch

1) Remove the fixing assembly from the transfer frame, and remove the transfer frame from the copier.
2) Remove the solenoid plate (1 tension spring), and loosen the hex screw with a hex key, and remove the spring clutch.

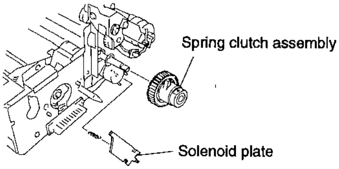


Figure 4-1115

3) Clean the shaft on which the spring clutch was found with alcohol.
4) Loosen the hex screw on the new spring clutch.
5) Install the new spring clutch to the shaft. At this time, put two transparencies cut to an appropriate width between the spring clutch assembly and the E-ring, and install the spring clutch while butting it against the E-ring. When tightening the hex screw, be sure that the D-cut of the screw and the shaft are perpendicular.

Caution:
Be sure not to leave out the work of putting transparencies between parts so that a gap will be provided ensuring correct operation of the spring clutch.

3. Attraction Push-On Unit Spring Clutch

1) Remove the attraction push-on roller unit.
2) Using a hex key, loosen the hex screw, and remove the spring clutch from the rear of the registration roller assembly.

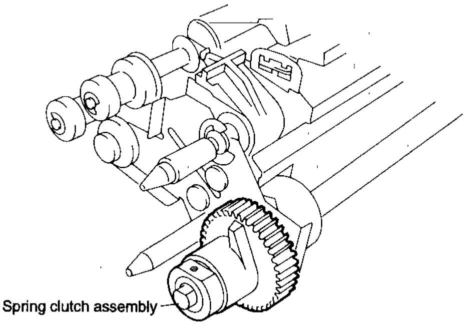


Figure 4-1116

3) Clean the shaft on which the spring clutch was found with alcohol.
4) Loosen the hex screw of the new spring clutch.
5) Install the new spring clutch to the shaft. At this time, put one transparency cut to an appropriate width between the spring clutch and the E-ring, and install the spring clutch while butting it against the E-ring.
Further, when tightening the hex screw, be sure that the screw and the D-cut of the shaft are perpendicular.

Caution:
Be sure not to leave out the work of putting transparencies between parts so that a gap will be provided ensuring correct operation of the spring clutch.

4. Transfer Cam Assembly Spring Clutch

1) Remove the rear cover, and open the DC controller PCB, and remove the support plate as shown in Figure 4-1119.
2) Remove the solenoid.
3) Remove the two screws, and remove the stopper.
4) Using a hex key, loosen the two hex screws, and remove the spring clutch.

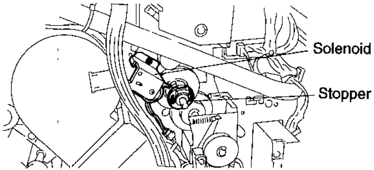


Figure 4-1117

5) Clean the shaft on which the spring clutch was found with alcohol.
6) Install the new spring clutch to the shaft. At this time, put one transparency cut to an appropriate width between the spring clutch and the E-ring, and install the spring clutch while butting it against the E-ring.

Caution:
When tightening the hex screws, keep the hole of the shaft facing up, and fit and tighten the screws in 9 and 12 o'clock direction.

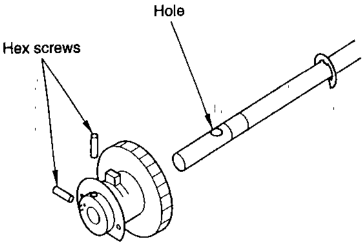


Figure 4-1118

If the new spring clutch is of a large diameter, you need not use a transparency; butt the spring clutch directly to the E-ring when installing it.

7) Install the spring clutch assembly while turning the stopper fully to the right.

> **Caution:**
> You must use a transparency to ensure the proper operation of the spring clutch by creating a gap. (You need not create a gap, however, if the spring clutch is of a large diameter.)

5. Transfer Drum Cleaner Spring Clutch

1) Remove the rear cover.
2) Open the DC controller PCB, and remove the support plate.

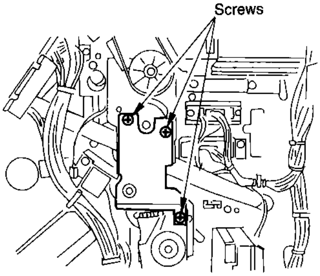


Figure 4-1119

3) Remove the drive belt; then, remove the two screws, and remove the support plate.

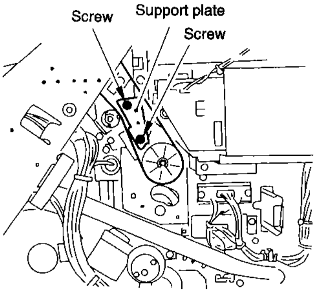

Screw
Support plate
Screw

Figure 4-1120

4) Disconnect the connector; then, remove the two screws, and remove the transfer cleaner drive assembly.

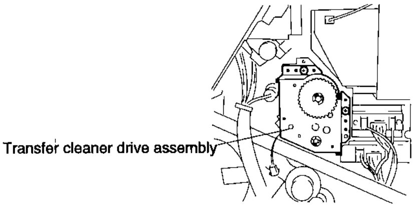

Transfer cleaner drive assembly

Figure 4-1121

5) Remove the screw, and remove the solenoid.
6) Remove the E-ring, washer, and bearing.

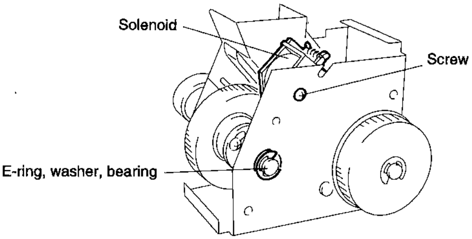

Solenoid
Screw
E-ring, washer, bearing

Figure 4-1122

7) Remove the two screws, E-ring, and bearing; then, divide the transfer cleaner drive assembly into two.

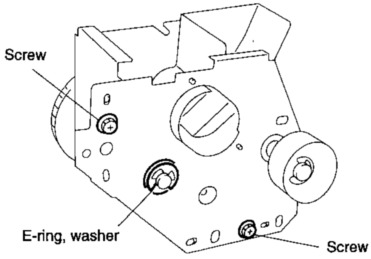

Screw
E-ring, washer
Screw

Figure 4-1123

8) Remove the two screws, and remove the stopper.

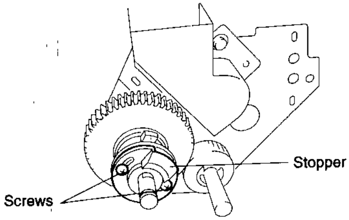


Figure 4-1124

9) Using a hex screw, loosen the two hex screws, and remove the spring clutch assembly.

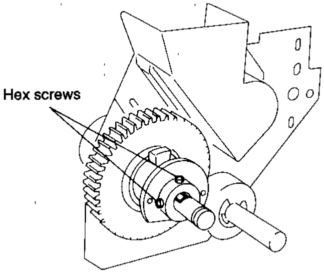


Figure 4-1125

10) Clean the shaft with alcohol.
11) Remove the stopper from the new spring clutch, and install the new spring clutch to the shaft. At this time, put one transparency cut to an appropriate width between the spring clutch and the E-ring, and install the spring clutch while butting it against the E-ring.

Caution:
When tightening the hex screws, keep the hole of the shaft facing up, and fit and tighten the screws in 9 and 12 o'clock direction.

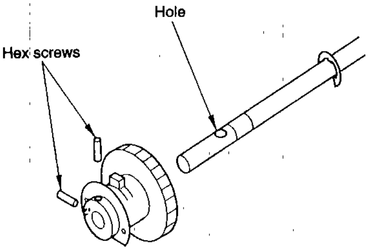


Figure 4-1126

If the new spring clutch is of a large diameter, you need not use a transparency; butt the spring clutch directly to the E-ring when installing it.

12) Remove the transparency, and install the spring clutch with the stopper turned fully to the right.

6. Developing Assembly Locking Unit Spring Clutch

1) Remove the developing assembly drive unit.
2) Using the hex key, loosen the hex screw; then, remove the developing drive unit spring clutch.
3) Clean the shaft on which the spring clutch was found with alcohol.
4) Loosen the hex screw on the new spring clutch.

5) Install the new spring clutch to the shaft. At this time, put one transparency cut to an appropriate width between the spring clutch and the E-ring, and install the spring clutch while butting it against the E-ring (If the new spring clutch is of a large diameter, you need not use a transparency; butt the spring clutch directly to the E-ring when installing it.). At this time, tighten the hex screw while keeping the shaft in place and turning the boss clockwise.

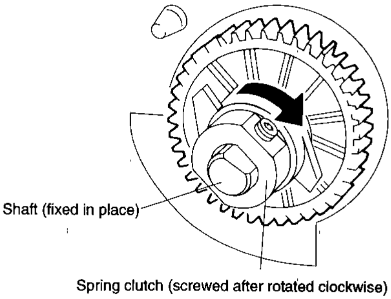


Figure 4-1127

Caution:

Be sure not to leave out the work of putting transparencies between parts so that a gap will be provided ensuring correct operation of the spring clutch. (You need not create a gap, however, if the spring clutch is of a large diameter.)

XII. STANDARDS AND ADJUSTMENTS

A. Mechanical

1. Non-Image Width

Make sure that the non-image width at the time of DIRECT with document detection off is as follows:

leading edge:	8.0 ±1.5 mm	(8.0 ±2.0 mm)
left/right:	2.0 ±1.0 mm	(2.0 ±1.5 mm)
trailing edge:	4.5 mm	(4.5 mm)

The value in parentheses refers to the 2nd side of a two-sided copy.

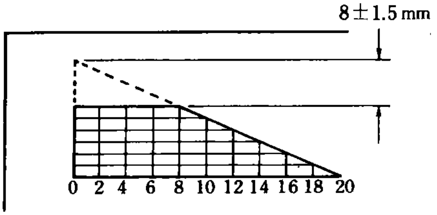


Figure 4-1201 Leading Edge Non-Image Width

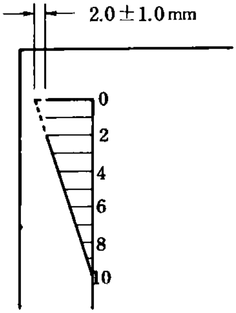


Figure 4-1202 Left/Right Non-Image Width

2. Image Margin

Make sure that the image margin at the time of DIRECT with document detection off is as follows:

leading edge:	8.0 ±1.5 mm	(8.0 ±2.0 mm)
left/right:	2.0 ±1.0 mm	(2.0 ±1.5 mm)
trailing edge:	4.5 ±1.5 mm	(4.5 ±2.0 mm)

The value in parentheses refers to the 2nd side of a two-sided copy.

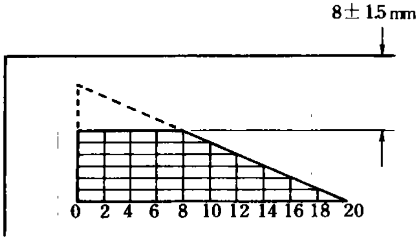


Figure 4-1203 Leading Edge Image Margin

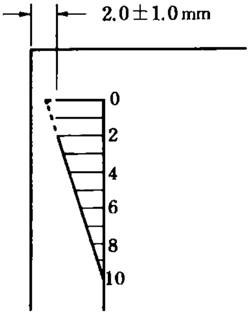


Figure 4-1204 Left/Right Image Margin

3. Checking and Adjusting the Non-Image Width and Margin

Make checks/adjustments in the order indicated:

- left-right registration adjustment
- retention position adjustment (ATTRACT)
- image margin adjustment (TR-DELAY)
- image read start position adjustment (ADJ-XY)
- image margin check

a. Adjusting the Left/Right Registration

1) Make 10 copies each from all the cassettes, multifeeder, and duplexing unit, and check the margin on left/right.
2) If the margin is outside the specification, adjust as follows:

- Pick-Up from the Cassette

1) Remove the cassette from the holder you want to adjust.
2) Turn the adjusting screw 1 to adjust the horizontal registration plate so that the horizontal registration on the copy image is 2 ±1 mm.

To increase the registration at the front,

↓

Turn the adjusting screw counterclockwise (a single turn will lead to a change of about 0.7 mm).

To increase the registration at the rear,

↓

Turn the adjusting screw clockwise (a single turn will lead to a change of about 0.7 mm).

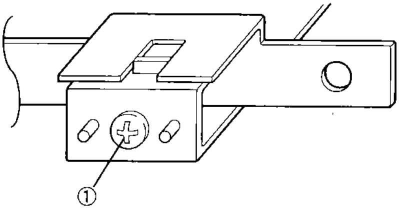


Figure 4-1205a

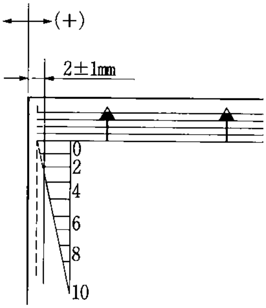


Figure 4-1205b

- Pick-Up from the Multifeeder
  Loosen the screw ①, and move the tray until 0 ±1.5 mm is met in DIRECT.

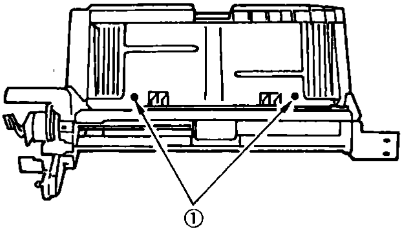


Figure 4-1206

- Two-Sided Copies
  Loosen the screw ①, and move the paper jogging guide plate until 0 ±1.5 mm is met in DIRECT.

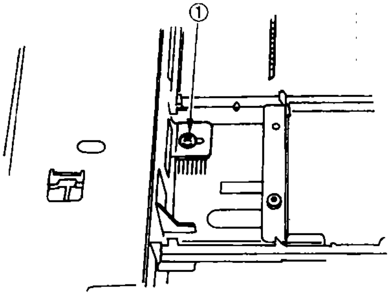
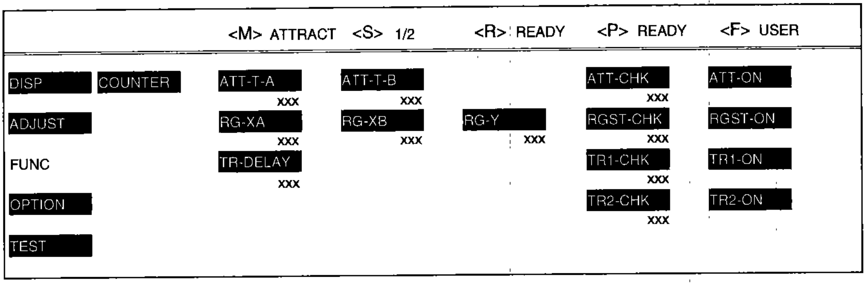


Figure 4-1207

b. Adjusting the Point of Retention (ATTRACT)



<M> ATTRACT <S> 1/2 <R> READY <P> READY <F> USER

DISP	COUNTER	ATT-T-A xxx	ATT-T-B xxx		ATT-CHK xxx	ATT-ON
ADJUST		RG-XA xxx	RG-XB xxx	RG-Y xxx	RGST-CHK xxx	RGST-ON
FUNC		TR-DELAY xxx			TR1-CHK xxx	TR1-ON
OPTION					TR2-CHK xxx	TR2-ON
TEST						

Figure 4-1208

1) Activate service mode.
2) Select 'FUNC'.
3) Select 'ATTRACT'.
4) Press 'ATT-CHK', and set it to '1', i.e., double-side retention of side B and side A.
5) Press 'ATT-ON.
   - Copy paper is picked up, retained, and stopped.
6) Pull out the transfer assembly frame.
7) Place a ruler or copy paper on the marking (Figure 4-1209) made in the transfer drum ring (front, rear), and measure point 'd' along the leading edge of the copy paper in relation to the marking. Take measurements for both side A and side B.

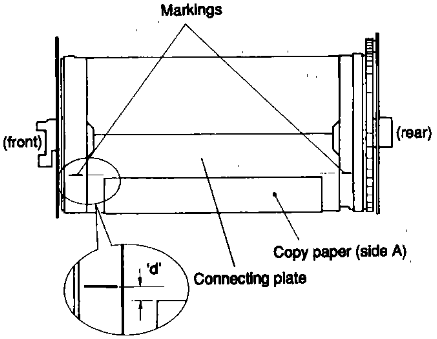


Figure 4-1209

8) For side A, select 'ATT-T-A' and for side B, select 'ATT-T-B'; then, make adjustments so that 'd' is 0 ±0.5 mm.
   - A change by '1' for 'ATT-T-A' or 'ATT-T-B' changes the point of retention by about 0.1 mm.
   - A higher setting *delays* the point of retention for copy paper (➡ direction); on the other hand, a lower setting *advances* the point of retention for copy paper (➡ direction).

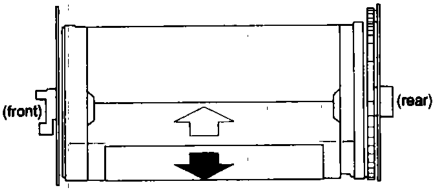


Figure 4-1210

9) After adjustment, turn the power switch off and then on.
   - You must turn the power switch off and then on, or the copy will not carry any image.

c. Adjusting the Image Leading Edge Margin (RG-XA, RG-XB)

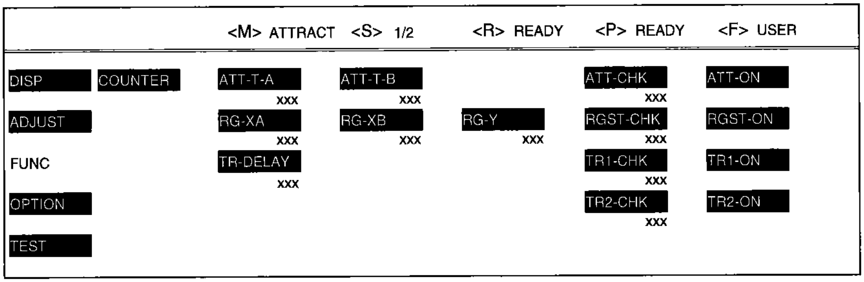
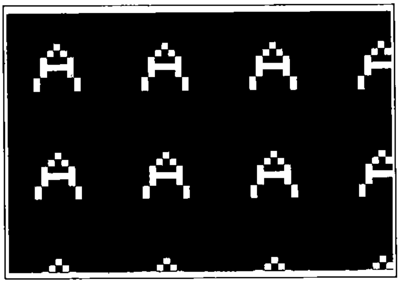
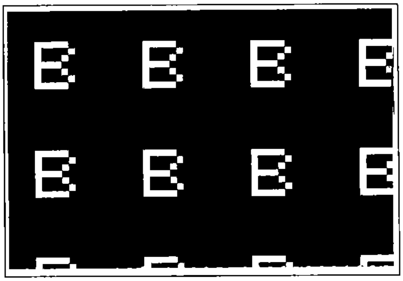

<M> ATTRACT <S> 1/2 <R> READY <P> READY <F> USER
DISP
COUNTER
ATT-T-A
xxx
ATT-T-B
xxx
ATT-CHK
xxx
ATT-ON
ADJUST
RG-XA
xxx
RG-XB
xxx
RG-Y
xxx
RGST-CHK
xxx
RGST-ON
FUNC
TR-DELAY
xxx
TR1-CHK
xxx
TR1-ON
OPTION
TR2-CHK
xxx
TR2-ON
TEST

Figure 4-1211

1) Activate service mode, and select 'ATTRACT' under 'FUNC' in service mode.
2) Press 'RGST-CHK', and set it to '1', i.e., double-side retention of side B and side A.
3) Press 'RGST-ON'.
   - A total of two test prints will be generated (Figure 4-1212).



Output of side A



Output of side B

Figure 4-1212

4) Measure the leading edge margin 'd' on the prints; take measurements on both side A and side B.

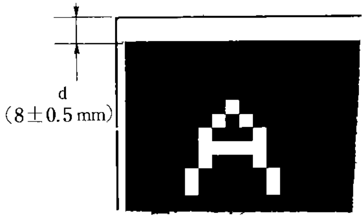


Figure 4-1213

5) For side A, select 'RG-XA' and for side B, select 'RG-XB'; then, make adjustments until d is 8 ±0.5 mm.
   - A change by '1' changes the leading edge margin by about 0.1 mm.
   - A higher setting increases the leading edge margin; a lower setting, on the other hand, decreases the leading edge margin.

d. Adjusting the Transfer Delay (TR-DELAY)

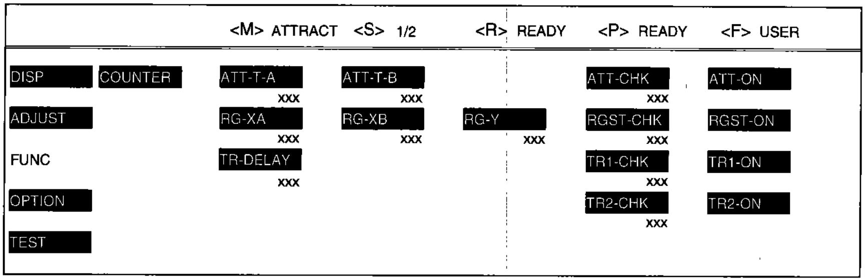
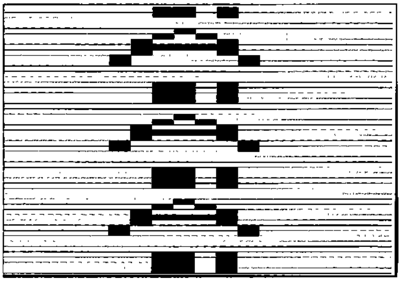
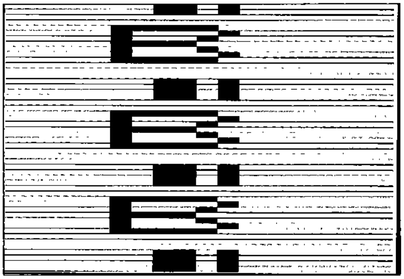

<M> ATTRACT <S> 1/2 <R> READY <P> READY <F> USER
DISP
COUNTER
ATT-T-A
xxx
ATT-T-B
xxx
ATT-CHK
xxx
ATT-ON
ADJUST
RG-XA
xxx
RG-XB
xxx
RG-Y
xxx
RGST-CHK
xxx
RGST-ON
FUNC
TR-DELAY
xxx
TR1-CHK
xxx
TR1-ON
OPTION
TR2-CHK
xxx
TR2-ON
TEST

Figure 4-1214

1) Activate service mode, and select 'ATTRACT' under 'FUNC'.
2) Press 'TR1-CHK', and set it to '1', i.e., double-side retention for side B and side A.
3) Press 'TR1-ON'.
   - A total of two test prints will be generated.



Test Print of Side A



Test Print of Side B

Figure 4-1215

4) Measure the transfer delay 'd' on the generated image of side B.

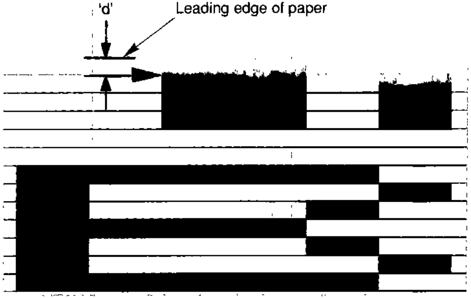
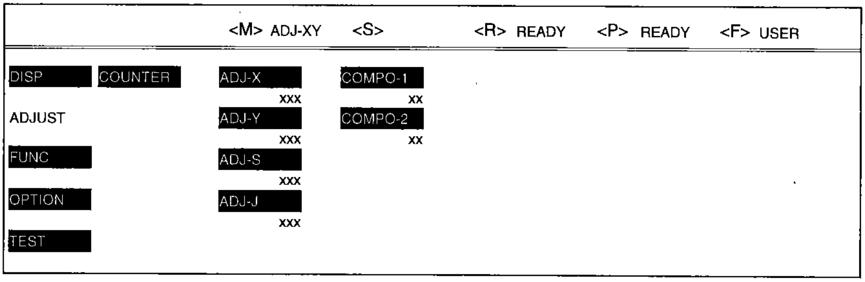

'd'
Leading edge of paper

Figure 4-1216

5) Select 'TR-DELAY', and make adjustments by changing the setting so that d is 3 ± 0.5 mm.
   - A change by '1' changes the transfer delay by about 0.1 mm.
   - A higher setting increases the transfer delay; a lower setting, on the other hand, decreases the transfer delay.
6) Press 'TR2-CHK', and set it to '1', i.e., double-side retention of side B and side A.
7) Press 'TR2-ON'.
8) Check the leading edge margin (8 ± 0.5 mm) on the printout.

e. Adjusting the Image Read Start Position(ADJ-XY)


<M> ADJ-XY <S> <R> READY <P> READY <F> USER

DISP COUNTER ADJ-X xxx COMPO-1 xx
ADJUST ADJ-Y xxx COMPO-2 xx
FUNC ADJ-S xxx
OPTION ADJ-J xxx
TEST

Figure 4-1217

1) Activate service mode, and select 'ADJ-XY' under 'ADJUST'.
2) Press the Copy Start key while the ADJ-XY screen is displayed.
    - The appropriate copy mode is set automatically, and a copy is made with a shift of about 50 mm as shown in Figure 4-1218.
3) If the part of the image is missing, decrease the setting of 'ADJ-X' and 'ADJ-Y'.
4) If the image includes areas outside the image area, increase the setting of 'ADJ-X' and 'ADJ-Y'.
5) Press the Copy Start key once again, and check.
6) Press the Reset key.

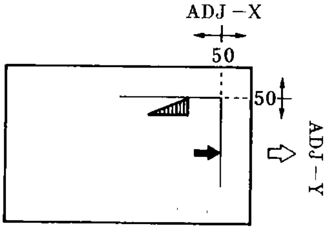


Figure 4-1218

4 Changing the Image Trailing Edge Margin

The standard for the image trailing edge margin is 4.5 ±1.5 mm. If the user requests a change, the trailing edge margin may be adjusted to 2.5 ± 1.5 mm after satisfying the conditions given under a.

a. Conditions

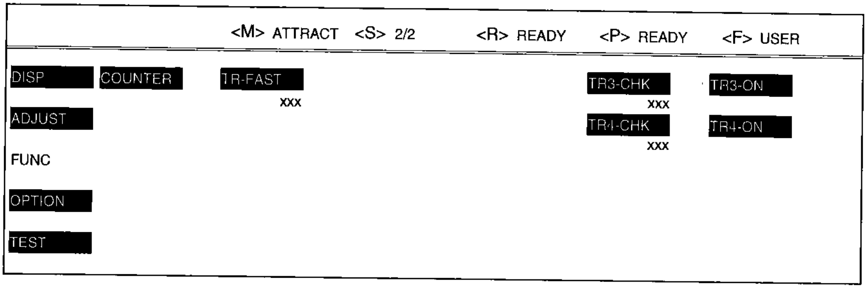
Make sure of the following to avoid drum memory caused by moist copy paper in a high-humidity environment:

- Install the cassette heater.
- Advise the user to prohibit the use of most paper.
- Advise the user to prohibit the use of the cassette 1 for Hammermill paper.
- Keep in mind that the trailing edge margin will be fixed to 4.5 mm for copies made in manual feeding or for the first side of a two-sided copy.

b. Steps

1) For the special transfer timing, see c.
2) For setting the trailing edge margin to 2.5 mm, see d.

c. Adjusting the Special Transfer Timing



<M> ATTRACT <S> 2/2 <R> READY <P> READY <F> USER

DISP

COUNTER

TR-FAST xxx

TR3-CHK xxx

TR3-ON

ADJUST

TR4-CHK xxx

TR4-ON

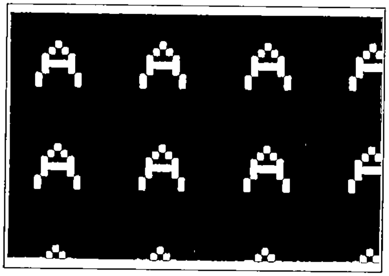
FUNC

OPTION

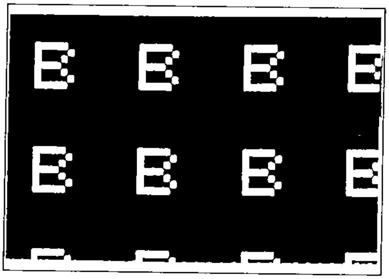
TEST

Figure 4-1219a

1) Activate service mode, and select 'ATTRACT' under 'FUNC'; then, press the Interrupt key.
2) Press 'TR-3CHK', and set it to '1' (2-sheet attraction mode; side A and side B).
3) Press 'TR-3ON.
   - A total of two print-outs will be generated (one each of the following).



Output of side A



Output of side B

Figure 4-1219b

4) Using the print-out of side B, measure the trailing edge transfer special timing length d.

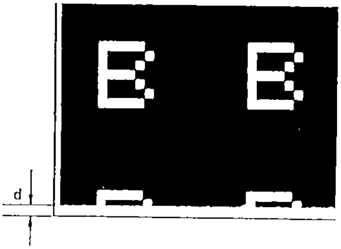


Figure 4-1219c

5) Select 'TR-FAST', and change the setting so that the d measured in step 4) will be 2.0 ± 0.5 mm.
   settings: -127 to 127
   unit: 0.1mm (A higher setting will result in a lower d.)
6) Press 'RGST-CHK' under 'ATTRACT', set the item to '1' (2-sheet retention for B-/A-side).
7) Press 'RGST-ON' under 'ATTRACT'. (An image with a trailing edge margin of 4.5 mm will be generated.)
8) Check to make sure that the trailing edge of the printed image is not blurred.

d. Setting the Trailing Edge Margin to 2.5 mm

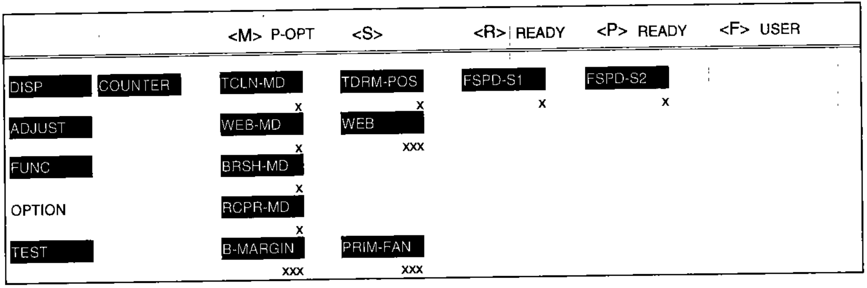

<M> P-OPT
<S>
<R> READY
<P> READY
<F> USER
DISP
COUNTER
TCLN-MD
x
TDRM-POS
x
FSPD-S1
x
FSPD-S2
x
ADJUST
WEB-MD
x
WEB
xxx
FUNC
BRSH-MD
x
OPTION
RCPR-MD
x
TEST
B-MARGIN
xxx
PRIM-FAN
xxx

Figure 2-1219d

1) Press 'B-MARGIN' under 'OPTION' in service mode.
2) Set 'B-MARGIN' to '1'.
   0: trailing edge margin 4.5 mm
   1: trailing edge margin 2.5 mm
3) Select 'ATTRACT' in service mode, and press the Interrupt key.
4) Press 'TR-4CHK', and set it to '1' (2-sheet attraction mode; side B and side B).
5) Press 'TR-4ON'.
   - Check to make sure that the trailing edge margin of the printed image is 2.5 mm.

Caution:
The same level of high voltage for transfer is for both normal and special transfer regardless of the setting of 'B-MARGIN' of 'P-OPT' under 'OPTION'.
To reset the trailing edge margin from 2.5 mm to 4.5 mm, you must make the necessary changes for special transfer timing in addition to changing '1' to '0' for 'B-MARGIN' of 'P-OPT' under 'OPTION'. Failure to do so can lead to drum memory.

5. Installing the Photosensitive Drum

1) Put drum cleaner lubricant evenly along the No. 2 blade of the black toner density sensor.

Caution:
1. Be sure to mix the lubricant well by shaking its container before application.
2. Be sure to apply the lubricant to both sides (A and B) as well as the edges of the blade.
3. Do not rub in the lubricant, or the edge may chip; apply as if to tap on the edge.

2) Apply the drum cleaner lubricant evenly over the blade in the photosensitive drum cleaning assembly.

Caution:
1. You need not perform the step if you have replaced the cleaning blade. Blades available as service parts are pre-coated with lubricant.
2. Shake the lubricant well before application.
3. Apply to sides A and B as well as the edge of the blade.
4. Do not apply as if to rub in the lubricant, or you could chip the edge; tap lightly.
5. If the application is not even, the copies may carry white vertical lines.

3) Dry-wipe the surface of the black toner density sensor.

Caution:
1. Do not use alcohol.
2. Take care not to touch the photosensitive drum.

4) Hold both ends of the photosensitive drum, and put it carefully into the unit along the guide rail ① of the photosensitive drum unit.

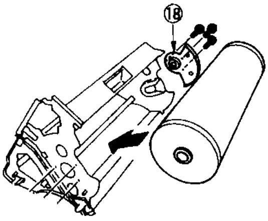
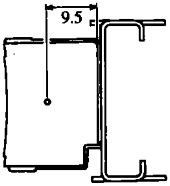
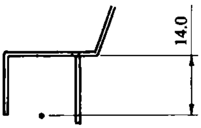
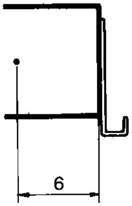


Figure 4-1219

5) Fix the butting block (front, rear) with six screws.
6) Install the photosensitive drum unit to the copier.
7) Connect the connector of the black density sensor, and install the photosensitive drum cleaner and primary corona assembly.
8) Replace the black developer.
9) Execute 'INIT-K' under 'INSTALL' under 'FUNC' of service mode to store the toner density data.
10) Execute auto gradation correction in user mode.

6. Height of the Corona Wires

Corona unit	Height of corona wire (mm)	Adjustable (mm; approx.)
Primary corona unit		4
Separation corona unit		4
External stalic eliminator corona unit		4

Note:
The height of each corona wire can be adjusted by turning the screw behind the corona unit; a full turn of the screw changes the position of the corona wire by about 0.7 mm.
*However, you cannot adjust the height of the transfer charging assembly, internal static eliminating assembly, or retention assembly.

7. Replacing the Developer

1) Open the front door (left, right), and remove the two screws ①; then, remove the hopper unit stopper fixing.

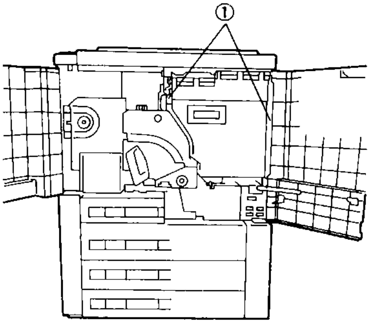


Figure 4-1220

2) Fully open the hopper unit.
3) Remove the cap ② from the outlet found at the bottom front of the developing assembly whose developer you want to replace.
   Place a plastic bag ③ or the like to receive developer; a fair amount of developer will fall out of the developing assembly.

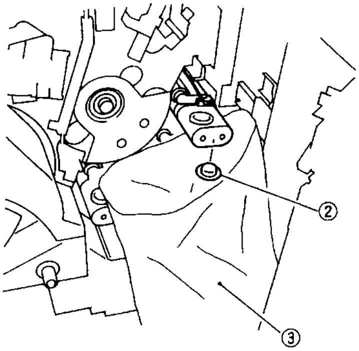


Figure 4-1221

4) Elect 'INSTALL' under 'FUNC' in service mode.
5) While holding a plastic bag over the outlet, press 'RECV-M/C/Y/K' according to the color of the developer you are replacing.
   - Stop the operation by pressing the Stop key (◉) when the developer stops pouring.
6) Attach the cap to the outlet.
7) Remove the screw, and remove the developing assembly; then, remove the cap from the outlet.
   - If you are removing Bk developing assembly, disconnect the connector.
8) While tilting the developing assembly, turn the gear by hand to pour out the developer.
   At this time, tilt the developing assembly further as you turn the gear until the developing assembly is fully upright and all developer has fallen out.

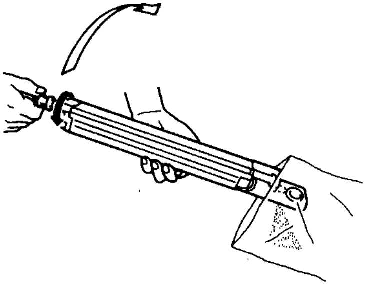


Figure 4-1222

9) Attach the cap to the outlet.
10) Install the developing assembly to the copier.
11) When the machine has completed warm-up, select 'INSTALL' under 'FUNC' in service mode.
12) Press 'SPLY-M/C/Y/K' according to the color of the developer you are replacing.
13) Check that the developing assembly becomes engaged and the screw inside the developing assembly starts to rotate.

14) Fit the developer funnel (accessory) in the supply mouth of the developing assembly.

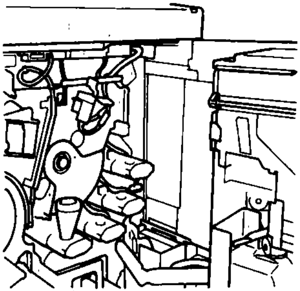


Figure 4-1223

15) Put developer into the developing assembly.
    - Tilt the container of the developer as you turn it to avoid spilling.

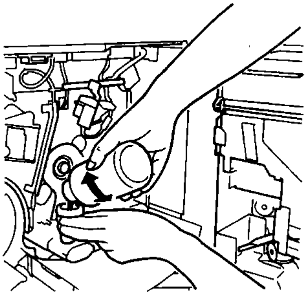


Figure 4-1224

16) When you have put all developer, press the Stop key.
17) Execute 'STIR-Y/M/C/K' in service mode. Wait until the notation of <P> on the display changes from '<P> SERVICE' to '<P> READY'.
18) Execute 'INIT-Y/M/C/K' in service mode. Wait until the notation of <P> on the display changes from '<P> SERVICE' to '<P> READY'.
19) Fill out the Service Data Sheet with ATR-related data.

8. Orientation of the Pick-Up Roller (cassette pick-up assembly, duplexing pick-up assembly)

Install the pick-up roller ① to the pick-up assembly so that the round marking ② found on its rubber portion is toward the front.

for front, use brass
for rear, use silver

Note:

for cassette pick-up assembly, gray
for duplexing unit pick-up assembly, black

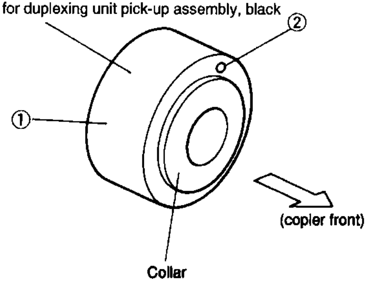
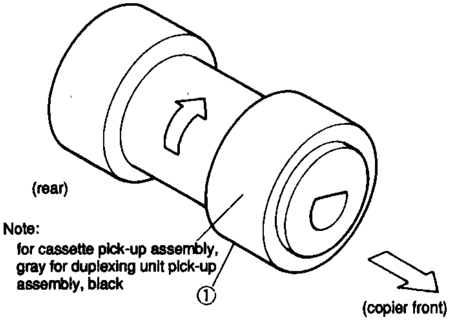


Figure4-1225

9. Orientation of the Separation Roller (cassette pick-up assembly, duplexing unit pick-up assembly)

Install the separation roller ① to the pick-up assembly so that the D-cut in the collar is toward the front.

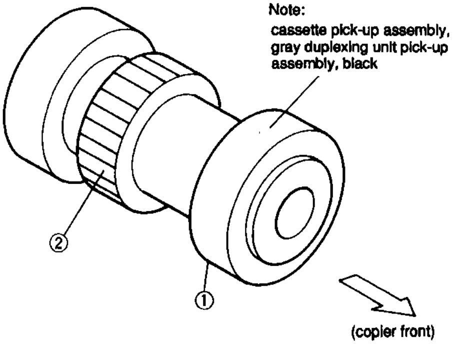


Note:
for cassette pick-up assembly, gray for duplexing unit pick-up assembly, black

Figure 4-1226

10. Orientation of the Feeding Roller (cassette pick-up assembly) and Feeding Roller 1 (duplexing unit pick-up assembly)

Install the feeding roller ① to the pick-up assembly so that the belt pulley ② attached to the separation roller is toward the rear.



Note:
cassette pick-up assembly, gray duplexing unit pick-up assembly, black

Figure 4-1227

11. Orientation of the Feeding Roller 2 (duplexing unit pick-up assembly)

Install the feeding roller 2 ① so that the round marking ② in the rubber portion is toward the front.

for front, brass
for rear, silver

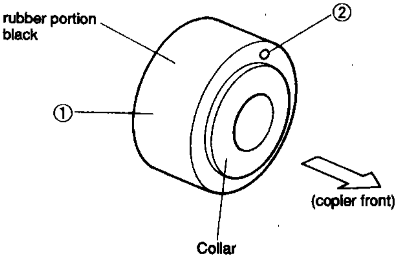


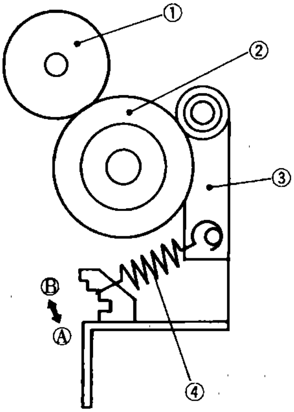
Figure 4-1228

12. Adjusting the Pressure of the Separation Roller

If double-feeding or pick-up failure occurs during pick-up operation, adjust the position of the pressure spring of the separation roller.

① If double-feeding occurs, move the spring hook in the direction of arrow Ⓐ.

② If pick-up failure occurs, move the spring hook in the direction of arrow Ⓑ.



① Feeding roller
② Separation roller
③ Pressure lever
④ Pressure spring

Figure 4-1229

13. Positioning the Pick-Up Assembly Pick-Up Roller Releasing Solenoid (SL16, SL17, SL18, SL19)

Install the solenoid so that the roller arm ① shown in Figure 4-1229 butts against the upper stay ② when the solenoid plunger is pushed in.

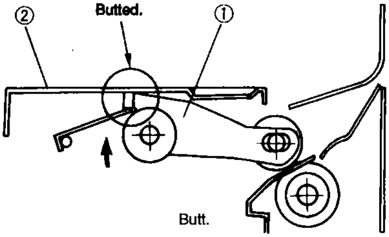


Figure 4-1230

14. Orientation of the Multifeeder Pick-Up Roller

Install the multifeeder pick-up roller ① so that the side with the collar marked with a cross ② is toward the rear.

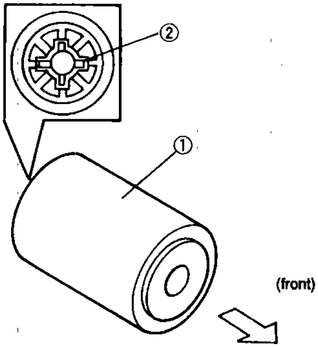


Figure 4-1231

15. Position of the Multifeeder Assembly Paper Guide Plate Cam

Adjust the engagement of the 26T gear 1 and 26T gear 2 so that the paper guide plate and paper guide plate cam are positioned as shown in Figure 4-1231 when the solenoid plate is in contact with the claw of the control ring.

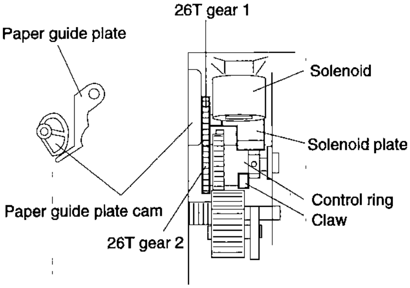


Figure 4-1232

16. Attaching the Timing Belt in the Multifeeder Assembly

Butt the rack plate of the multifeeder against A (open state).

Move the slide volume in the direction of B, and attaching the timing belt to the pulley.

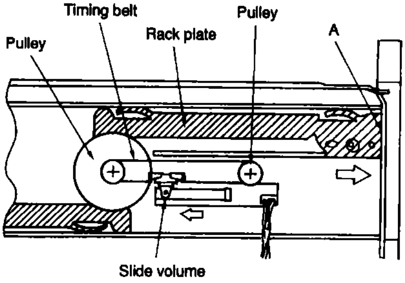


Figure 4-1233

17. Adjusting the Pressure of the Multifeeder Assembly Separation Pad

If double-feeding or pick-up failure occurs during pick-up operation, adjust the position of the separation pad pressure spring.

① If double-feeding occurs, move the position of the spring holder in the direction of A.

② If pick-up failure occurs, move the position of the spring holder in the direction of B.

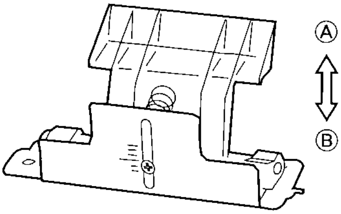


Figure 4-1234

18. Position of the Delivery Paper Deflecting Plate Drive Solenoid (SL20)

1) Place the delivery assembly upright on a level surface.

2) Loosen the adjusting screw and make adjustments so that the paper deflecting plate butts against the delivery paper upper guide when the solenoid is on (viewing the delivery assembly from the rear). (See Figure 4-1235.)

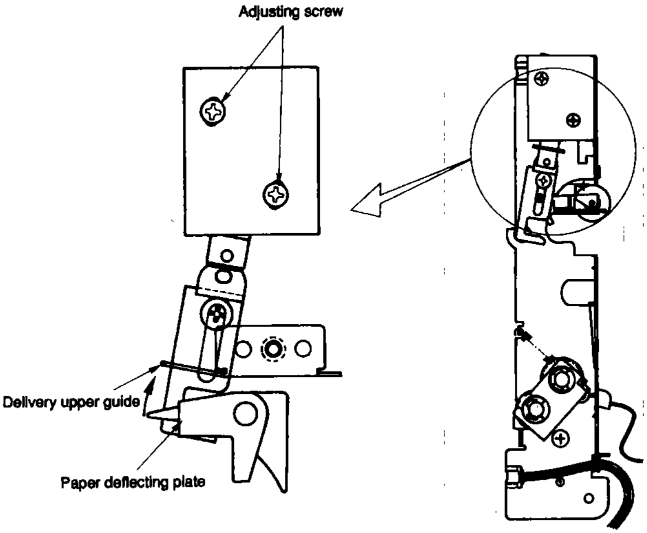

Adjusting screw
Delivery upper guide
Paper deflecting plate

Figure 4-1235

19. Routing the Scanner Drive Cable

For instructions on how to route the scanner drive cable, see Chapter 4 "Routing the Scanner Drive Cable" in the Service Manual.

Caution:
Take care not damage the wire by the edge of the metal plate.

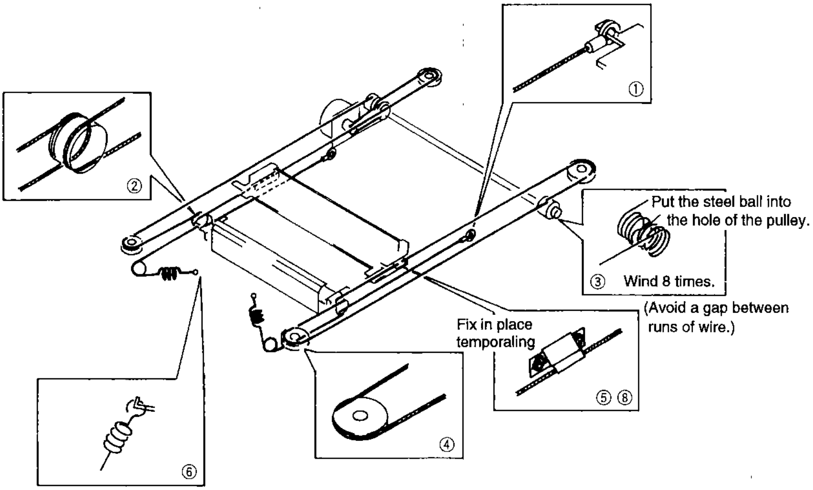

①
②
Put the steel ball into the hole of the pulley.
③ Wind 8 times.
(Avoid a gap between runs of wire.)
Fix in place temporaling
⑤ ⑧
④
⑥

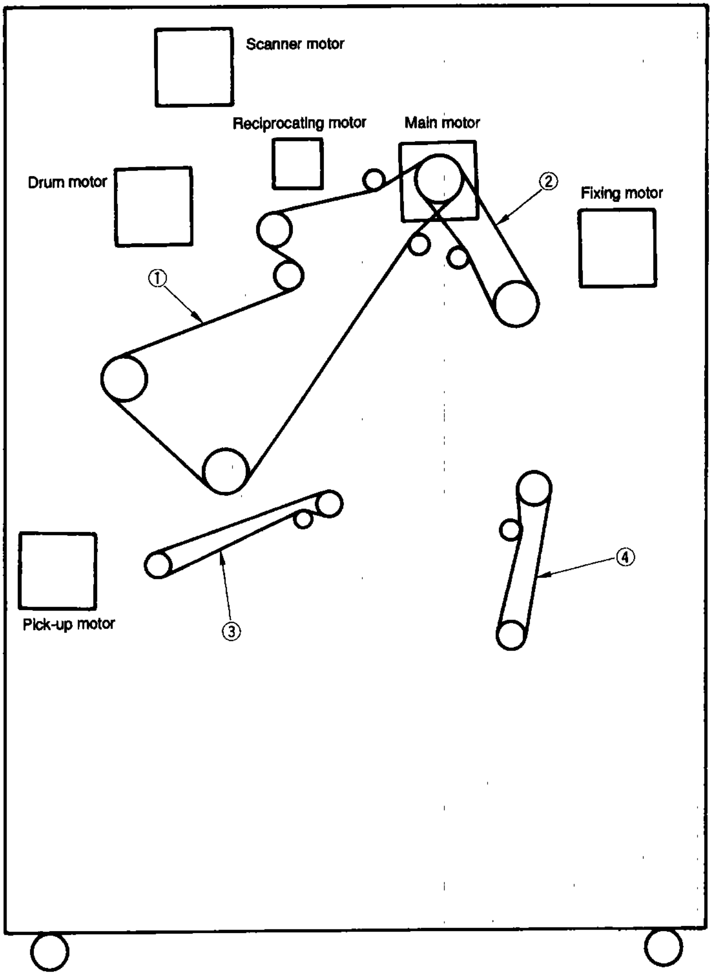
Figure 4-1236

Caution:

1. Make sure that the scanner cable is free of twists and it has not ridden over the pulley.
2. Move the No. 1 and No. 2 mirror mounts by hand to make sure that they move smoothly. At this time, do not touch the reflecting plate.

20. Routing the Drive Cables

See Figure 4-1237 for how to route the drive cables.


Scanner motor
Reciprocating motor
Main motor
Drum motor
②
Fixing motor
①
④
Pick-up motor
③

① Developing assembly, registration, photosensitive drum cleaner drive cables
② Feeding assembly, delivery feeding assembly drive cables
③ Pick-up assembly drive belt
④ Duplexing unit feeding assembly drive belt

Figure 4-1237

21. Points to Note When Replacing the Fixing Heater

- Do not touch the surface of the heater.

Reference:

Both upper and lower fixing heaters are of the same type; moreover, the heaters do not have orientation (front/rear).

22. Adjusting the Nip (adjusting the nut for the fixing assembly pressure)

- The nip is correct if it is within the value shown in Table 4-1. Otherwise, turn the adjusting nut.

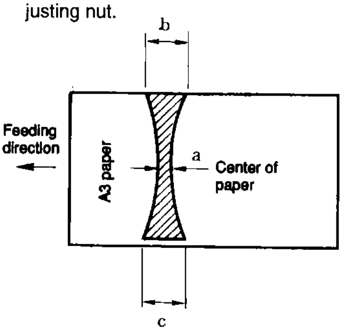


Figure 4-1238

Note:

b and c refer to points 10 through 15 mm from the edge of paper.

Dimensions	Measured when both upper and lower rollers are sufficiently heated.
a	7 ±0.5 (mm)
I b – c I	0.5 (mm) or less
b – a c – a	1 (mm) or less

Table 4-1

- Measuring the Nip Width

  If you are taking measurements while the rollers are cold, wait 15 min after standby and make 20 copies before taking measurements.

- Taking Measurements

1) Activate service mode.
2) Select 'FUSER' under 'FUNC', and press 'NIP-CHK' to execute the mode. (The operation ends when the notation of <P> changes from 'READY' to 'SERVICE' to 'READY'.)

23. Adjusting the Home Position of the Duplexing Unit Stacking Assembly Paper Jogging Plate

1) Select A4R or LTR-R; then, copy on the 1st side of a two-sided copy.
2) Slide out the duplexing unit toward the front.
3) Measure the distance L of the paper jogging plate ①.

A4R: L=210 ±0.3 mm
LTR-R: L=216 ±0.3 mm

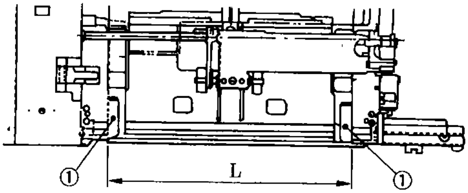


Figure 4-1239

4) If the measurement is outside the specification, remove the front cover of the holding plate.
5) Loosen the screw ②, and turn the adjusting screw ③ to adjust the position of the paper jogging guide plate home position sensor.

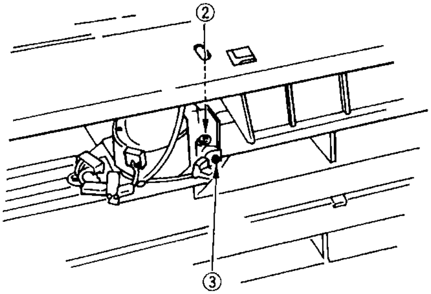


Figure 4-1240

24. Adjusting the Position of the Duplexing Unit Stacking Assembly Paper Feeding Roller Down Solenoid (SL22)

Let the feeding roller drop on its own weight to the bottom of the duplexing unit stacking assembly.

At this time, keep the plunger of the solenoid pushed, and fix the solenoid ③ in place so that the distance between the edges of the lever ① and arm ② is 1.5 ±0.5 mm.

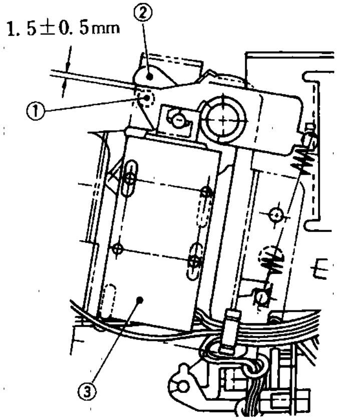


Figure 4-1241

25. Positioning the Duplexing Unit Pick-Up Assembly Pick-Up Roller Releasing Solenoid (SL21)

1) Remove the duplexing unit pick-up assembly.
2) Place the duplexing unit pick-up assembly as shown in Figure 4-1241; then, lift the lever ① so that the pick-up roller ② drops on its own weight.
3) Adjust the pick-up roller releasing solenoid (SL21) so that the length L is 65 ±1 mm.

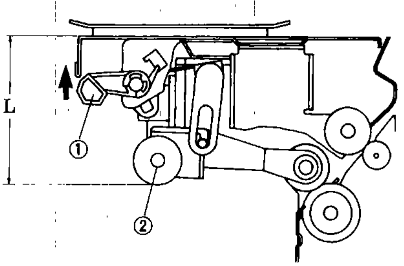


Figure 4-1242

26. Adjusting the Drive Belt for the Duplexing Unit Stacking Assembly Feeding Roller

Fix the idler mount ① while pushing it in the direction of the arrow with a force of 250 g.

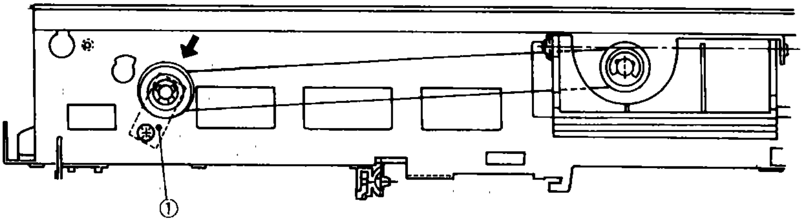


Figure 4-1243

27. Adjusting the Drive Belt for the Duplexing Unit Feeding Assembly

Fix the tension mount ① in place while pushing it in the direction of the arrow with a force of 450 ±50 g.

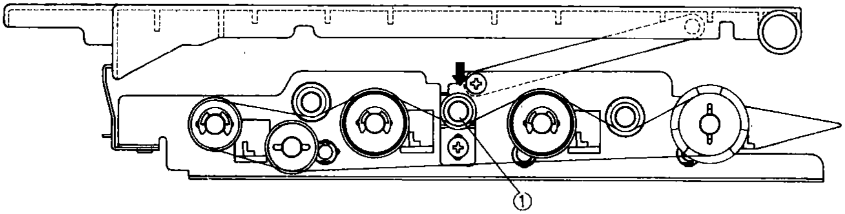


Figure 4-1244

28. Positioning the Duplexing Unit Stacking Assembly Stopper Plate Drive Solenoid (SL27)

Install the solenoid ③ so that the gap between the shutter plate ① and pin ② is 0.5 mm when the plunger of the solenoid is pushed in.

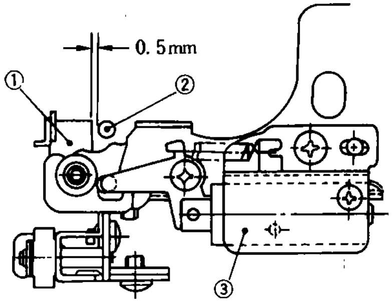


Figure 4-1245

29. Attaching the Timing Belt for the Duplexing Unit Stacking Assembly Paper Guide Plate

Install the gear ① with the paper jogging guide plate fully open.

Attach the timing belt ③ to the gear ① and pulley ②.

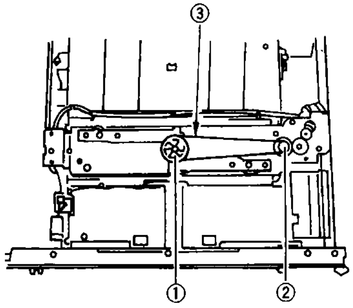


Figure4-1246

30. Positioning the Photosensitive Drum Fixing Shaft

Slide out the photosensiitive drum frame unit about 5 cm from the machine, and insert it back into the machine once again.If the photosensitive drum frame unit cannot be moved smoothly at this time, adjust the position of the photosensitive drum fixing shaft using the drum shaft positioning tool (FY9-3016-000) as follows:

(You need not adjust the position if the copied are free of color displacement, blurring, or pitch discrepancy and the discrepancy between the photosensitive drum fixing shaft and the hole of the photosensitive drum flange is no more than 1 mm and, therefore, the drum fixing shaft may be corrected by hand.)

1) Remove the flywheel.
2) Remove the photosensitive drum frame unit from the machine.
3) Remove the photosensitive drum from the photosensitive drum frame unit.
4) Insert the photosensitive drum frame unit ① into the machine, and fix it in place using three screws ②. At this time, keep the following removed: photosensitive drum, photosensitive drum butting block(front, rear), photosensitive drum center fixing roll, black toner density sensor, photosensitive drum cleaner unit, primary corona assembly, and photosensitive drum cleaner front paper sensor .

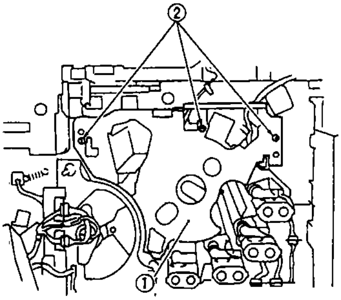


Figure 4-1247

5) Loosen the seven fixing screws ③ of the drum motor assembly. (If the drum shaft support plate fixing ④ is found, remove it.)

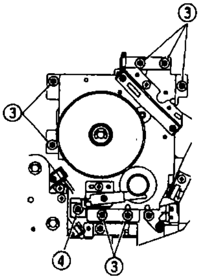


Figure 4-1248

6) Attach the drum shaft positioning tool ⑤ to the photosensitive drum frame unit ⑥ using the two screws ⑦ removed in step 3). (Pay attention to the orientation of the positioning tool.)

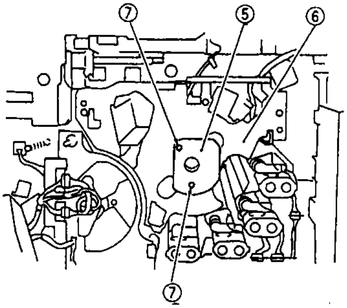


Figure 4-1249

7) Tighten the seven screws on the drum motor loosend in step 5).
8) Install the unit and parts removed in step 5).
9) Detach the drum shaft positioning tool, and remove the photosensitive drum frame unit from the machine; then , install it back to the machine together with the unit and parts removed in step 2), 3), and 4).
10) Install the flywheel, and install the external covers.

31. Adjusting the Transfer Separation Claw Position

Perform the following steps when replacing the transfer sheet.

1) Peel off the transfer sheet.
2) Rotate the transfer drum ring so that the transfer drum connecting plate is opposite of the transfer drum separation claw roll.
3) Push the positioning roll of the transfer drum separation claw so that it comes into contact with the transfer drum ring butting rubber. (Avoid excessive force.)
4) Check to make sure that the distance between the transfer separation claw roll and the transfer drum connecting plate is 0.1 to 0.7 mm using a gap gauge (CK-0057 or CK-0061).
   Note that a Canon-recommended transparency is about 0.1 mm thick, while the gap gauge CK-0057 is 0.3 mm max. and CK-0061 is 0.45 mm thick max.

Caution:
Be sure to measure the highest point of the separation claw roller and the connecting plate.

5) If the gap measured in step 4) is not within the standard, loosen the screw (glued in place), and adjust the position of the separation claw.
6) Repeat steps 3) through 5) until the gap between the separation claw roll and the connecting plate is as specified.
7) If the gap fails to fall within the standard, replace the transfer separation claw assembly, and make adjustments by performing steps 3) through 5).
8) Attach the transfer sheet.

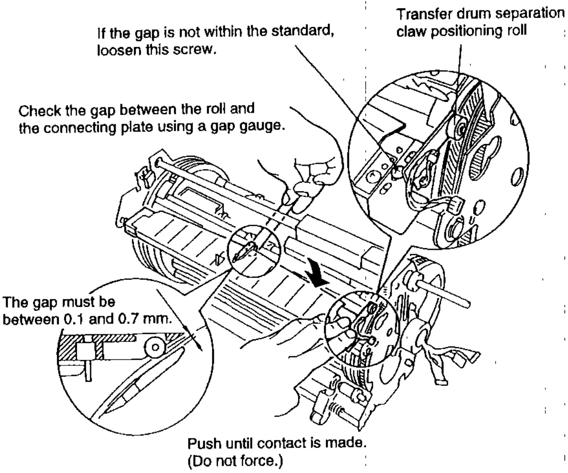

If the gap is not within the standard, loosen this screw.
Transfer drum separation claw positioning roll
Check the gap between the roll and the connecting plate using a gap gauge.
The gap must be between 0.1 and 0.7 mm.
Push until contact is made. (Do not force.)

Figure 4-1250

I. SELECTING THE SITE OF INSTALLATION

Make the following considerations when selecting the site of installation.

Visit the user before delivery of the machine to make sure that the site meets all the requirements.

1) There must be a grounded power outlet capable of providing the rated voltage ±10%. In addition, the outlet must be available exclusively for the machine—sharing it with a refrigerator or the like, which keeps turning on and off, causes voltage fluctuations, affecting the copy images.

2) The temperature and humidity of the site must be within the range shown in Figure 5-1. In particular, avoid spots near water faucets, water boilers, humidifiers, and refrigerators.

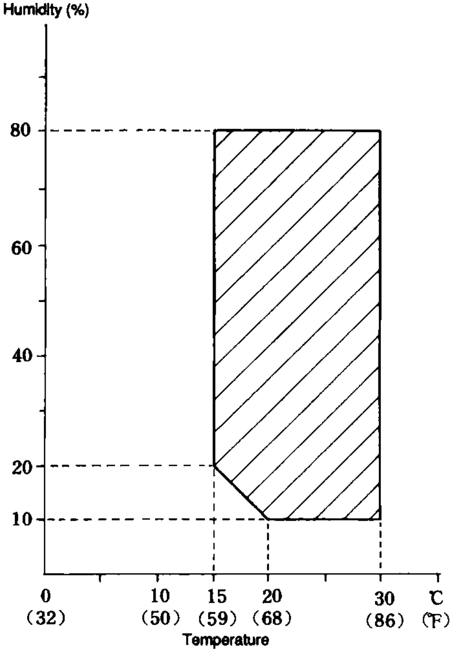


Figure 5-1 Site Environment

3) Avoid spots near sources of fire or spots subject to dust or ammonium gas. Avoid spots subject to direct rays of the sun; otherwise, provide curtains.

4) Make sure the room is well ventilated.

Caution:
The level of ozone generated by the machine will not affect the health of the individuals near it; however, it is best to make sure that the site is adequately ventilated, as some find the odor unpleasant.

5) Make sure the floor can support the machine level, and the machine's feet will remain in contact with the floor.

6) Make sure the site will allow adequate space for maintenance and copying work.

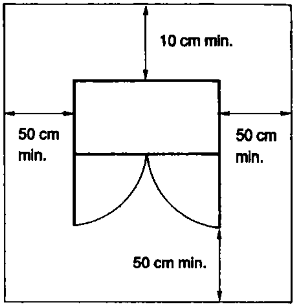
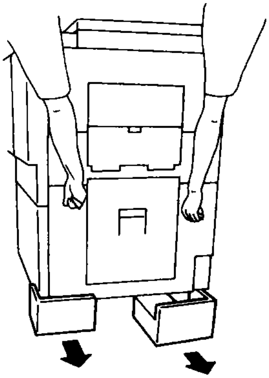


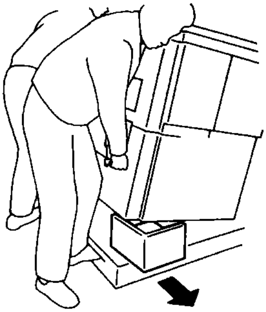
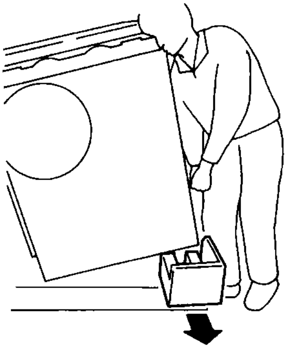
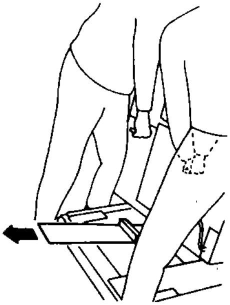
Figure 5-2

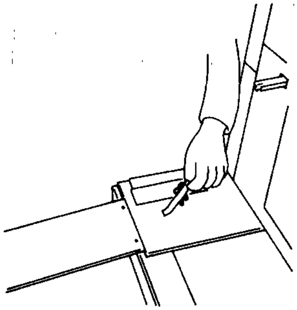
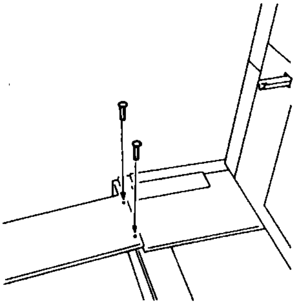
II. INSTALLING THE MACHINE

Bringing in metal objects from a cold to warm place causes droplets of water to form on surfaces. This phenomenon is known as *condensation*, and condensation in a copier can lead to generation of blank copies. To prevent such a problem, leave the machine alone for at least one hour, and make sure that it has become acclimatized to the room temperature before beginning work.

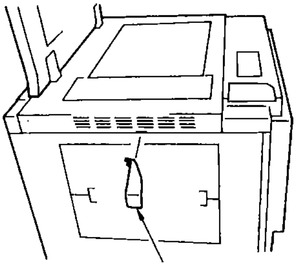
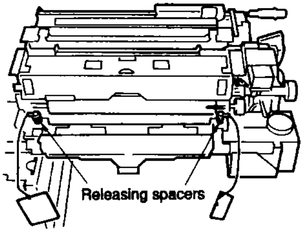
A. Unpacking

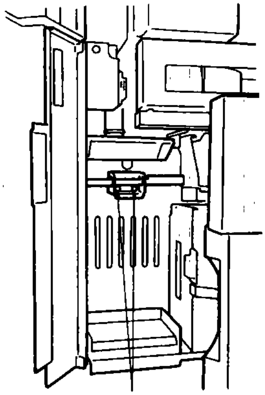
No.	Step	Remarks
1	Open the shipping box.	
2	Tear the plastic bag containing the copier, and remove the fixing tape; then, pull out the grips.	
3	The copier weighs about 300 kg; take sufficient care when performing the work. Work in a group of two—lift the pick-up side (right side) about 5 cm, and pull out the cushion material from the bottom in the direction of the arrows.	

No.	Step	Remarks
4	Work in a group of two—lift the delivery side (left side), and remove the cushion material from the bottom in the direction of the arrows.	 
5	Work in a group of two—lift the pick-up side (right side), and pull out the cardboard from the bottom, and remove the slope plate.	

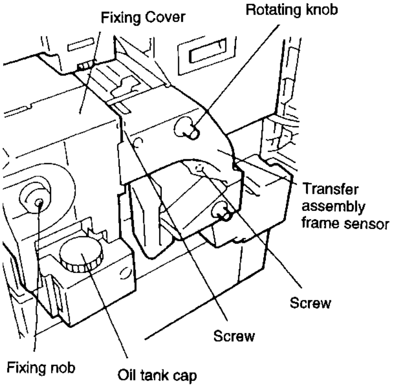
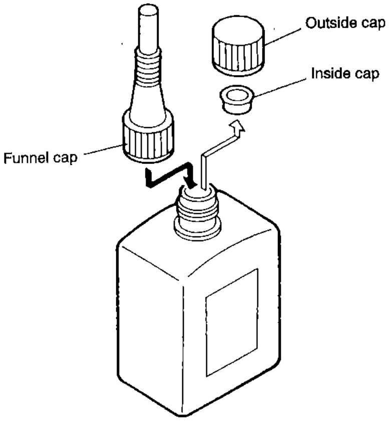
No.	Step	Remarks
6	Remove the two pins attached with tape; set the slope plate, and fix it in place using the pins. (Make sure that the boss in the middle faces down.)	 
7	Slide the copier down the skid. (Work in a group of two—one pushing the copier and the other, supporting it from its bottom.)	
8	Take out the parts and accessories from the cardboard box that came with the machine. Take out the M, C, Y, and Bk starter developers, and shake them well; peel off the seals, and keep them in a place free of dust. This is to acclimatize the starter developers.	Make sure that none of the following parts and accessories are missing: • Copy tray • Control key, door switch lever • Silicone oil bottle • Hopper stopper (4 pcs.) • User's Manual • Funnel for starter developer (4 pcs.) • Waste toner case • Size Label, duplexing unit label • Silicone oil tank funnel cap • Grounding wire

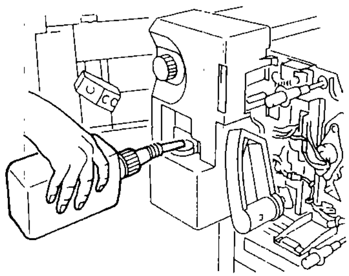
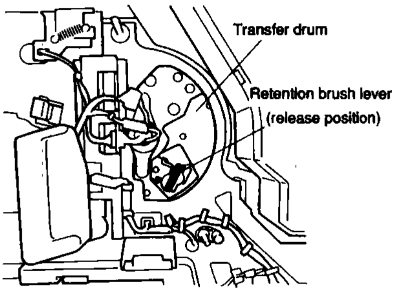
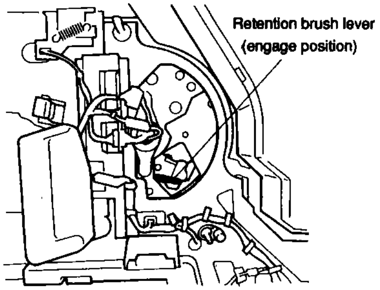
B. Removing the Fixing Members and Installing the Waste Toner Case

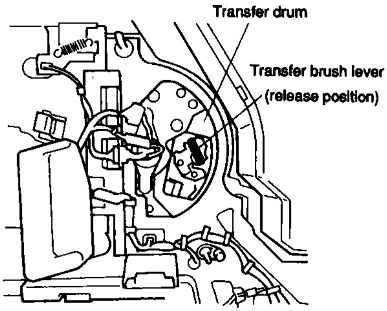
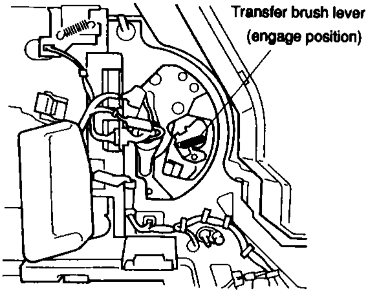
No.	Step	Remarks
1	Remove the packaging tape and protection tape from the copier.	
2	Removing the scanner metal fixing Peel off the tape from the scanner metal fixing found on the outside of the left cover; then, slide the metal fixing from rear to front, and pull it to the left to remove.	 Keep the metal fixing in the service document compartment found below the right door for use when relocating the machine.
3	Open the front door, and remove the tape from the lever and fixing members.	
4	Take out the fixing members and fixing tape from inside the cassette.	
5	Release the lever, and slide out the transfer frame.	
6	Pull out the two fixing roller releasing spacers.	

No.	Step	Remarks
7	Slide out the cassette 2, duplexing unit, and cassettes 3 and 4 and open the lower cover, and remove the grip from the bottom left front (2 screws); then, set the waste toner case.	 The grip found at the bottom left front will be used again when relocating the machine: store it away in the service document compartment found below the right door.

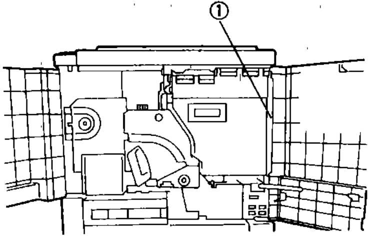
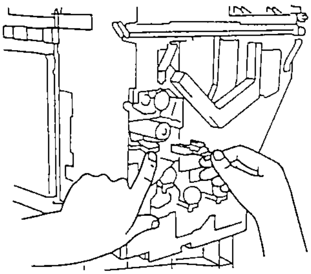
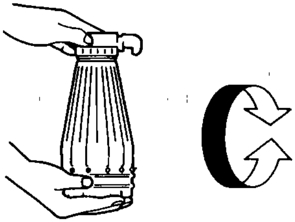
C. Pouring the Fixing Oil

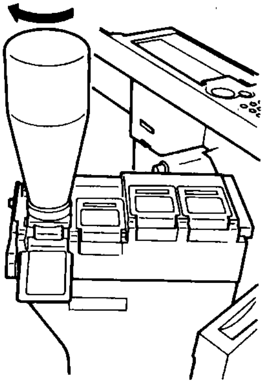
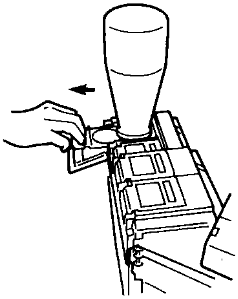
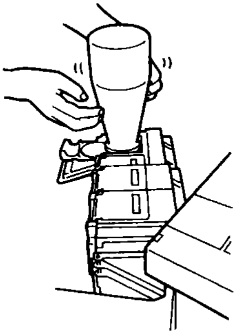
No.	Step	Remarks
1	Remove the transfer drum rotating knob; then remove the transfer frame cover (2 screws), and remove the fixing member. Remove the fixing assembly rotating knob (1 screw), then, remove the fixing cover (2 screws), and remove the packing from inside.	 Fixing Cover Rotating knob Transfer assembly frame sensor Screw Screw Fixing nob Oil tank cap
2	Remove the cap from the fixing oil tank.	
3	Remove the outside and inside caps of the fixing oil bottle, and fit the funnel cap that comes with the machine in their place.	 Outside cap Inside cap Funnel cap

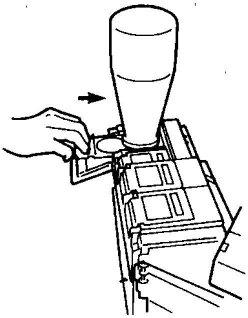
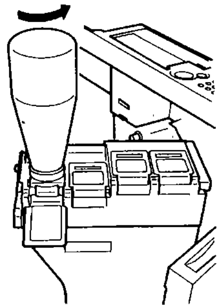
No.	Step	Remarks
4	Pour all the fixing oil into the tank.	
5	Fit the caps tothe fixing oil tank.	
6	Turn the gear of the transfer drum counterclockwise with a finger until the lever of the retention brush is in view. **Caution:** Turning the gear counterclockwise can generate a clicking sound because of the CCW rotation stop; this is normal, and you may ignore the sound. Shift the lever of the retention brush to the left to engage the retention brush.	 Transfer drum Retention brush lever (release position)  Retention brush lever (engage position)

No.	Step	Remarks
7	Turn the gear of the transfer drum with a finger until the lever of the transfer brush is in view. Shift the lever of the transfer brush to the left to engage the transfer brush.	 Transfer drum Transfer brush lever (release position)  Transfer brush lever (engage position)
8	Install the cover and the rotating knob; then, push the transfer assembly into the machine.	

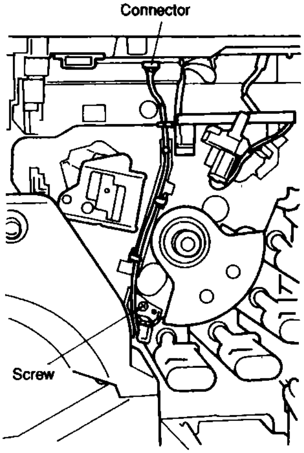
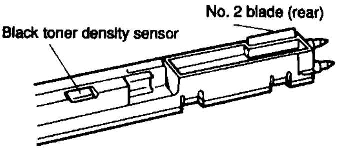
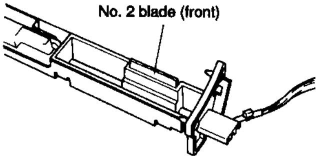
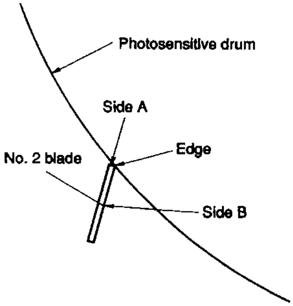
D. Supplying Toner

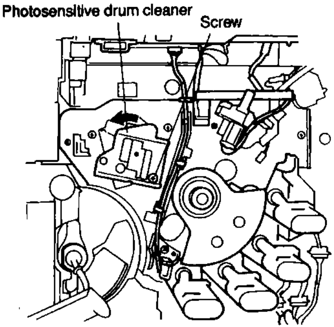
No.	Step	Remarks
1	Remove the screw from the stopper plate on the right door, and fully open the right door. Remove the slide stoppers of the hopper unit (2 screws).	
2	While pushing the hopper stopper down, slide out the hopper unit, and rotate it.	
3	Place copy paper between the open hopper and the floor, and insert the hopper stopper (accessory) into the four supply mouths found at the bottom of the hopper (for each color).	
4	Slowly agitate the Bk toner bottle at least 20 time as shown. **Caution:** Agitate the bottle just before setting it onto the hopper. Make sure that the toner has become loose and that there are no lumps.	

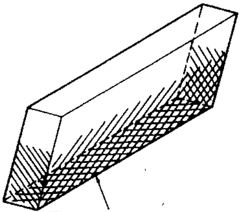
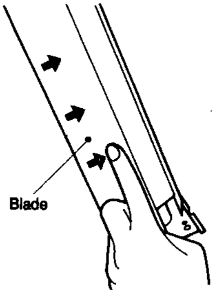
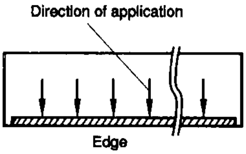
No.	Step	Remarks
5	Open the lid of the Bk toner hopper, and attach the Bk toner bottle into the hopper; hold the base of the bottle, and turn the bottle about 10° to the right.	
6	Open the slide shutter of the Bk toner bottle, and tap the bottle a couple of times on its bottom and side. • Record when you have started supplying the toner. Make sure that all of the toner has fallen into the hopper.	 

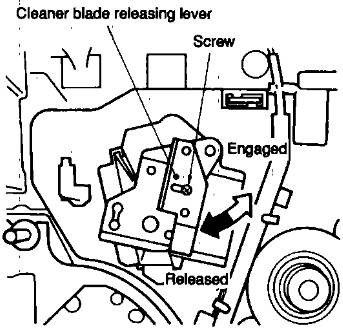
No.	Step	Remarks
7	Close the slide shutter of the Bk toner bottle, and turn the bottle about 10° to the left to remove. Check to make sure that no toner remains on the mesh covering the toner inlet; if toner remains, tap lightly on the hopper assembly so that the toner will fall into the hopper.	 
8	Repeat the steps for the M, C, and Y toners.	
9	Perform the steps given under "E. Removing the Drum Cleaner" and "F. Supplying the Starter Developer."	

E. Removing the Drum Cleaner

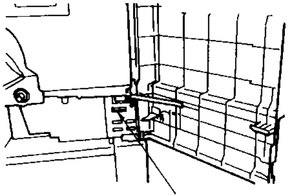
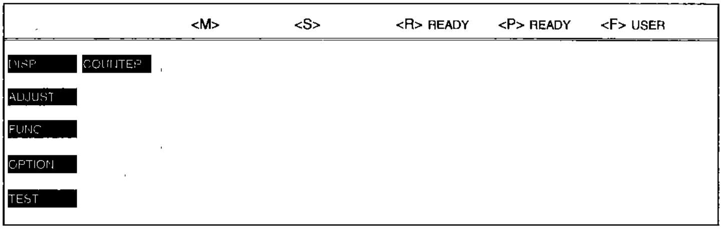
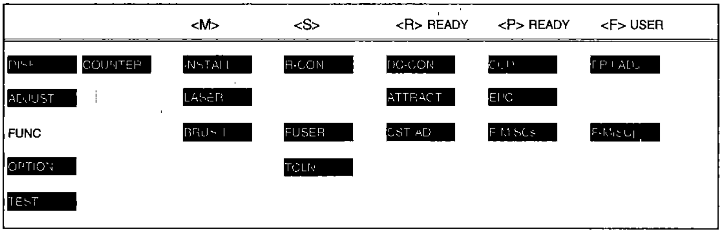
No.	Step	Remarks
1	Disconnect the connector, free the harness from the edge saddle, and pull out the black toner density sensor (1 screw); be sure to pull the unit straight out.	 Connector Screw
2	Apply drum cleaner lubricant evenly on the No. 2 blade (front, rear). • Shake the drum cleaner lubricant well before application. • Be sure to apply the lubricant on sides A and B as well as the edge. • Do not rub in the lubricant, or you may chip the edge; instead, tap it lightly onto the blade.	 No. 2 blade (rear) Black toner density sensor  No. 2 blade (front)  Photosensitive drum Side A No. 2 blade Edge Side B

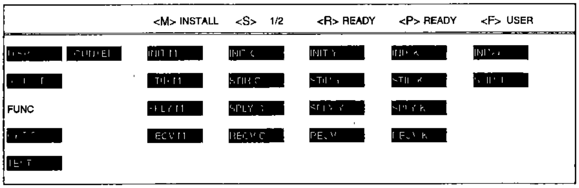
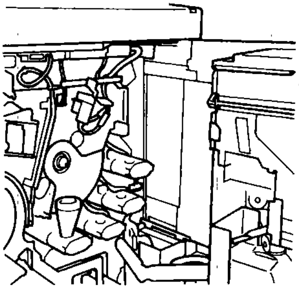
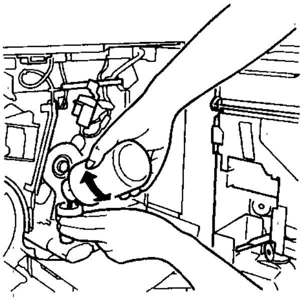
No.	Step	Remarks
3	Dry wipe the sensor face of the black toner density sensor. • Do not use alcohol.	
4	After attaching the black toner density sensor, connect the connector (1 screw). • Take care not to touch the photosensitive drum.	Bringing the No.2 blade into contact with the photosensitive drum will let the lubricant stick to the photosensitive drum, possibly leading to transfer faults (white spots)
5	Remove the screw, and shift the photosensitive drum cleaner to the left; then, slide out the photosensitive drum cleaner.	

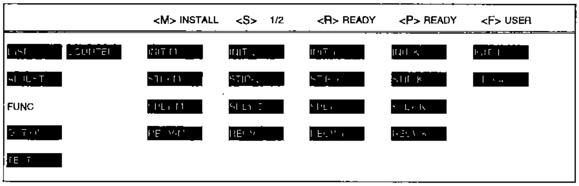
No.	Step	Remarks
6	Apply drum cleaner lubricant evenly on the blade of the photosensitive drum cleaner; use lint-free paper around your finger. • Uneven application can cause white vertical lines on copies. • Be sure to apply to all surfaces in addition to the edge, except the lower surface. • Do not rub in the lubricant, or you may chip the edge; instead, tap lightly. • Start from the top toward the edge surface as if to orient the lubricant where it will come into contact with the drum.	 The edge will come into contact with the photosensitive drum.   Direction of application Edge
7	Attach the photosensitive drum cleaner (1 screw). • Take care not to touch the photosensitive drum.	

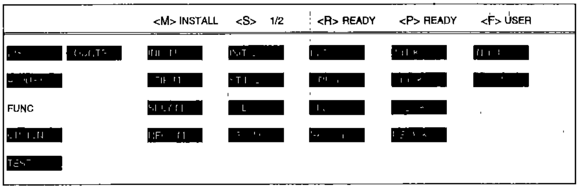
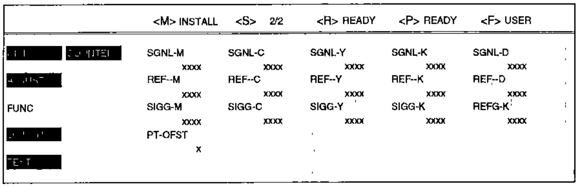
No.	Step	Remarks
8	Loosen the screw to engage the cleaner releasing lever; fix the screw in place. (The blade is engaged when the lever is as shown in the diagram). **Caution:** You must make sure that the screw is securely in place; otherwise, the cleaning assembly may become damaged.	 Cleaner blade releasing lever Screw Engaged Released
9	After drawing out the transfer assembly frame and attaching the transfer assembly frame cover (2 screws), attach the transfer drum rotating knob.	

F. Supplying the Starter Developer

No.	Step	Remarks
1	Close the left door, and insert the door switch actuator into the door switch (right).	 Door switch (right)
2	Insert the control key	
3	Connect the power plug, and turn on the power switch.	Make sure that the voltage is as rated, ±10%.
4	During the wait period, perform the following: • Place paper in the cassettes. • Attach the original tray (option).	
5	When the warm-up period is over, press *, 2, 8, and * to activate service mode. (Press keys 2 and 8 simultaneously.)	
6	Press 'FUNC'.  <M> <S> <R> READY <P> READY <F> USER DISP COUNTER ADJUST FUNC OPTION TEST	
7	Press 'INSTALL'.  <M> <S> <R> READY <P> READY <F> USER DISP COUNTER INSTALL R-CON DC-CON CLP FP ADJ ADJUST LASER ATTRACT EPC FUNC BRUSH FUSER CST AD F MISCs F-MISCU OPTION TCLN TEST	

No.	Step	Remarks
8	Press 'SPLY-K'.  <M> INSTALL <S> 1/2 <R> READY <P> READY <F> USER FUNC INIT-M SPLY-K Check to make sure that the machine has completed its wait-up period ('P' on the service mode display is 'READY') before executing 'SPLY-K' in service mode.	
9	The Bk developing assembly will become engaged, and the feeding screw inside the developing assembly will start to rotate.	
10	Attach the starter developer supply funnel that comes with the copier (not with the starter developer) to the supply mouth of the Bk developing assembly.	 • Perform for one color only. • Do not use the supply funnel that comes with the starter developer; its mouth is too small.
11	Pour the starter developer into the developing assembly. • Try slanting the bottle gradually while turning it to avoid spilling the starter developer.	

No.	Step	Remarks
12	When all starter developer has poured into the developing assembly, press the Stop key to stop operation.	
13	Repeat steps 9, 10, 11, 12, 13, and 14 for M, C, and Y toners. (Press 'SPLY-M', 'SPLY-C', or 'SPLY-Y' according to the color of the toner.)	
14	When all developing assemblies have been supplied with their respective toners, wait 10 min. or more; and then remove the toner hopper stoppers. **Caution:** Be sure to pull the hopper stopper horizontally; pulling it at an angle will damage the sealing, whose chips may fall into the developing assembly.	
15	Open the left door, turn the hopper unit slowly, and place the spacer on the left of the hopper on the rail while pushing the hopper stopper.	
16	Push in the hopper unit carefully until it reaches the locking position at the rear. **Caution:** Exercise care; rough handling can cause large amounts of toner to fall from the toner hopper assembly.	
17	Press 'STIR-4', and wait until stirring stops (about 10 min).  Check to make sure that the machine has completed its wait-up period ('P' on the service mode display is 'READY') before executing 'STIR-4' in service mode.	

No.	Step	Remarks
18	Press 'INIT-4'.	Wait until ATR is over; it will take about 5 min.
	 <M> INSTALL <S> 1/2 <R> READY <P> READY <F> USER Check to make sure that the machine has completed its wait-up period ('P' on the service mode display is 'READY') before executing 'INIT-4' in service mode.	
19	Press 'INTERRUPT'.  <M> INSTALL <S> 2/2 <R> READY <P> READY <F> USER SGNL-M xxxx SGNL-C xxxx SGNL-Y xxxx SGNL-K xxxx SGNL-D xxxx REF--M xxxx REF--C xxxx REF--Y xxxx REF--K xxxx REF--D xxxx SIGG-M xxxx SIGG-C xxxx SIGG-Y xxxx SIGG-K xxxx REFG-K xxxx PT-OFST x **Caution:** Check to make sure that the wait-up period (<P> in service mode is 'READY') is over before executing 'INIT-4'.	
20	Take notes of the value of 'SGNL-K' indicated when you executed ATR automatic adjustment in step 19.	
21	Select 'DC-CON' under 'FUNC' of service mode, and enter a value obtained by adding '37' to the value being indicated for 'SGNL-K' into 'SGNL-K'.	
22	Press 'SEND' at the lower right hand corner of the screen, and leave service mode; then, turn off and then on the power switch.	
23	Record data related to ATR on the Service Data Sheet. For 'SGNL-K', use the value you entered for a second time.	The Service Data Sheet is attached behind the DC controller PCB cover on the rear cover.
24	Press the Reset key twice, and remove the door switch actuator.	
25	Attach the slide stopper of the hopper unit and the stopper tape on the right door (1 screw).	
26	Close the front door.	

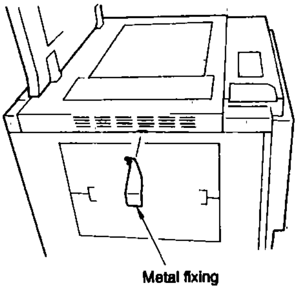
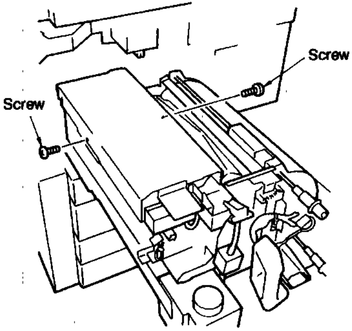
G. Checking the Images/Operation

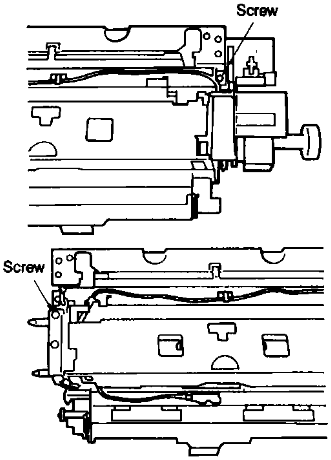
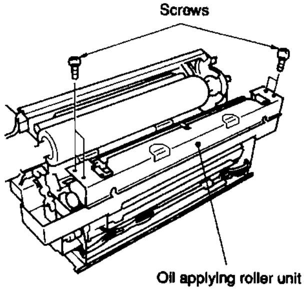
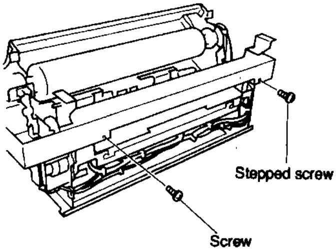
No.	Step	Remarks
1	Remove the door switch actuator, and close the front door.	
2	Configure the cassette (size) to suit the needs of the user. First, adjust the side guide plate to suit the paper size; then, put copy paper in the cassette, and adjust the rear end guide plate to the trailing edge of the paper.	
3	Remove the cassette size plate from each cassette holder, and attach the appropriate size label to each plate. Put the size plates back into position.	
4	Set the cassettes into the copier.	• Make sure that the 'ADD PAPER' message goes off. • Press the keys other than the Copy Start key on the control panel to make sure that the operations are normal.
5	Set the Test Sheet on the copyboard, and check the images on its copies made using all cassettes.	• Make sure that there is no abnormal sound. • Check the copy image for each default reproduction ratio. • Make sure the copies are made as many as specified. • If the copy image is not normal, perform the Image Adjustment Basic Procedure.
6	Select 'PASCAL' under 'ADJUST' in service mode; then, make sure that PASCAL is '1'; otherwise, set it to '1'.	
7	Press the Reset key to leave service mode.	
8	Make copies in manual mode.	• Make sure that the copies are made normally.
9	Check that all external covers are free of scratches and deformations.	
10	Clean up the area around the copier.	
11	Put the copier back into its original position.	• Make sure that the copier is more or less level.
12	Fill out the Service Sheet with necessary information.	

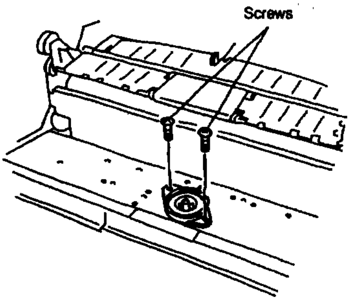
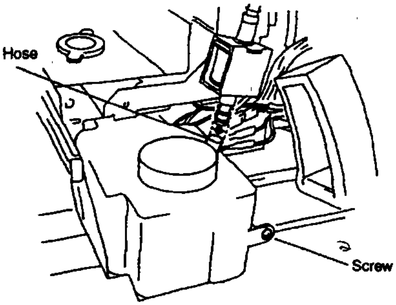
Install the options as necessary only after completing the above steps.

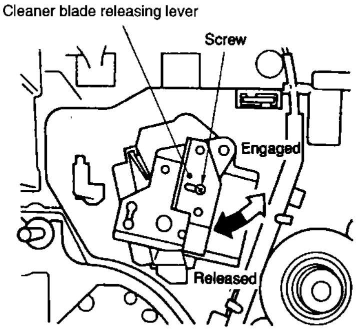
III. RELOCATING THE MACHINE

Go through the following steps before moving the machine by truck or other means of transportation after it has been installed.

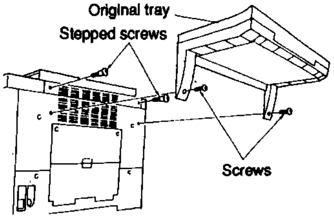
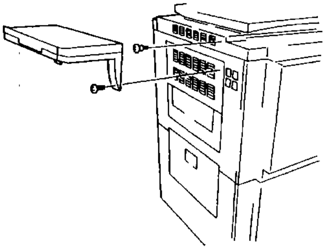
No.	Step	Remarks
1	Tape the lid of the toner hopper in place.	
2	Attaching the Scanner Metal Fixing Put the metal fixing to the hole of the delivery assembly, and fix the scanner mirror mount by sliding it from the front to the rear.	
3	Slide out the transfer assembly frame.	
4	Attach the fixing members from below the transfer assembly frame for the transfer drum and transfer cleaner.	
5	Pull out the fixing assembly, and remove the fixing assembly cover. (Place a newspaper or the like on the floor to avoid staining with fixing oil.)	

No.	Step	Remarks
6	Remove the two screws, and open the upper fixing roller unit.	
7	Remove the four screws, and remove the oil applying roller unit. (Take care so that oil will not drip from the oil applying roller unit onto the floor.)	
8	Remove the two screws, and remove the upper oil pan. (The rear is fixed with a stepped screw.) Tilt the upper oil pan to pour the fixing oil into the oil case. Attach the upper oil pan, oil applying roller unit, and upper fixing roller unit; then, push in the fixing assembly/transfer assembly frame unit into the copier.	

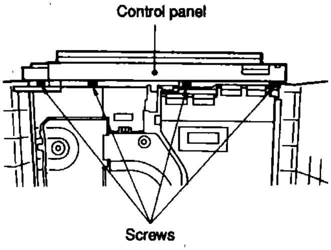
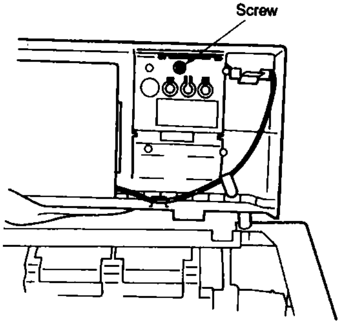
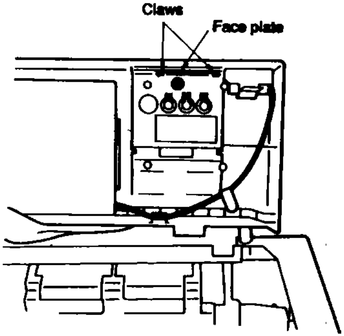
No.	Step	Remarks
9	Remove the two screws, and remove the oil receptacle.	
10	Detach the hose of the oil tank from the electromagnetic pump.	
11	Remove the screw, and slide out the oil tank assembly toward the front; then, draw out the silicone oil from the oil tank. **Reference:** The filter in the pipe of the oil tank is used to prevent contamination by foreign matter; its location is not important as long as its is inside the pipe.	
12	Assemble the part in reverse order (steps 11, 10, 9).	

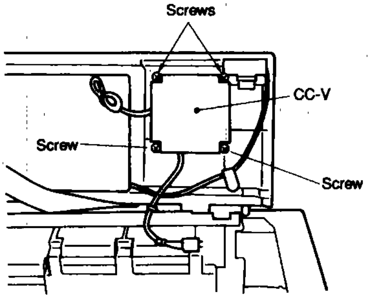
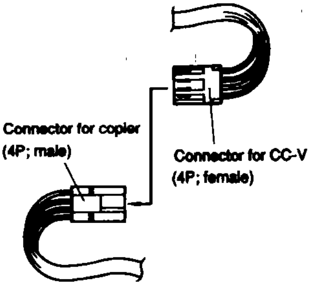
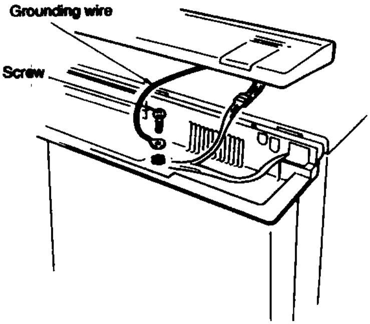
No.	Step	Remarks
13	Loosen the screw, and shift the cleaning blade releasing lever slowly to release position; then, tighten the screw while holding the lever in place.	 Cleaner blade releasing lever Screw Engaged Released
14	Tape the releasing lever of the transfer drum in place.	
15	Tape the front door, delivery assembly, and pick-up assembly in place.	

IV. INSTALLING THE ORIGINAL TRAY

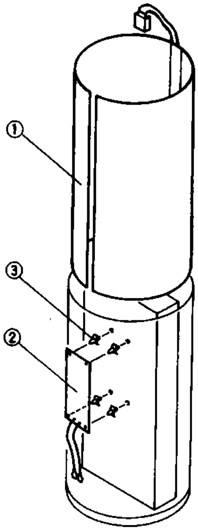
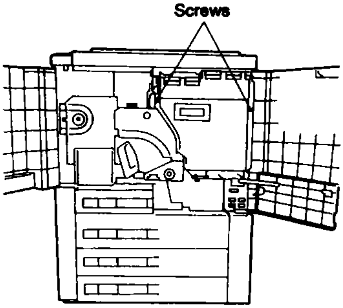
No.	Step	Remarks
1	Peel off the face sticker from the copier, and fit two stepped screws to the left or right of the copier.	
2	Fit the original tray on the stepped screws, and fix the original tray with screws.	 

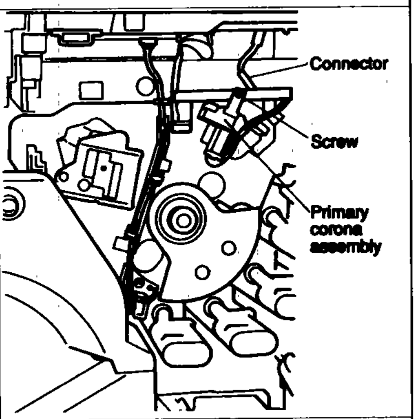
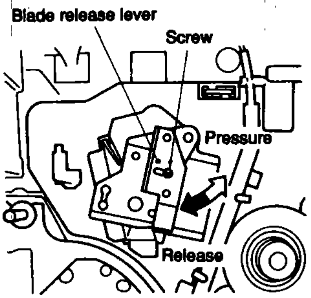
V. INSTALLING THE CONTROL CARD-V

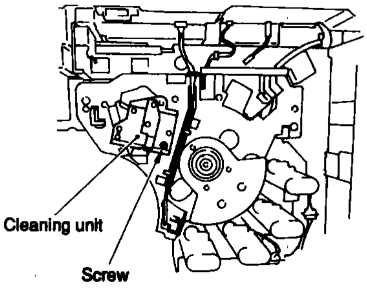
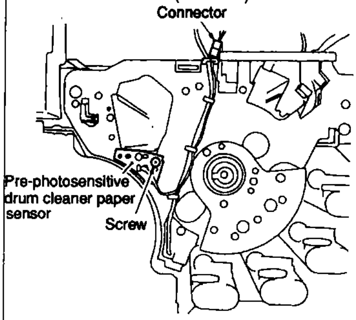
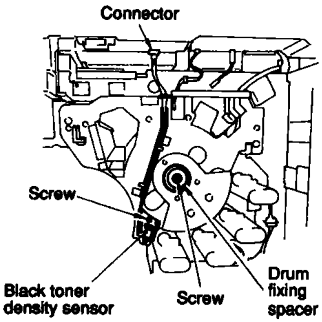
No.	Step	Remarks
1	Open the copier's front door, and remove the four screws used to fix the control panel in place; then, turn over the control panel.	
2	Remove the screw from the face plate.	
3	Disengage the claws, and remove the face plate from the card slot.	
4	Attach the insulating sheet to the opening for the CC-V's display on the control panel.	
5	Peel off the protective sheet attached to the display of the CC-V.	

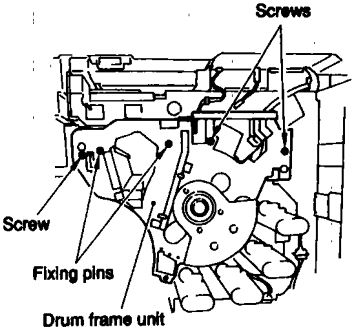
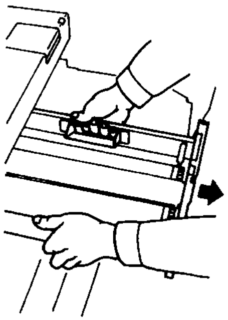
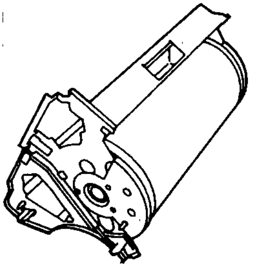
No.	Step	Remarks
6	Fix the CC-V to the control panel using four self-tapping screws. At this time, insert a card into the CC-V; and fix the CC-V at a point where insertion and removal of the card is smooth. In addition, check to make sure that the connector for the printer is centered in the hole.	 Screws CC-V Screw Screw
7	Disconnect the shorting connector, and connect the connector (4P) of the CC-V in its place. (The connector for the copier is found under the control panel.)	 Connector for copier (4P; male) Connector for CC-V (4P; female)
8	Fix the grounding wire of the CC-V using the screw attached to the bottom of the copier's control panel.	 Grounding wire Screw
9	Peel off the protective sheet from the control panel nameplate of the CC-V.	
10	Attach the control panel nameplate of the CC-V to the copier's control panel.	
11	Attach the control panel to the copier.	
12	Turn on the copier's power switch, and check the operation of the CC-V.	

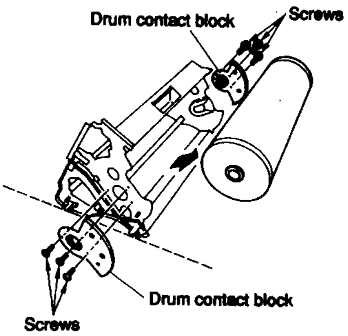
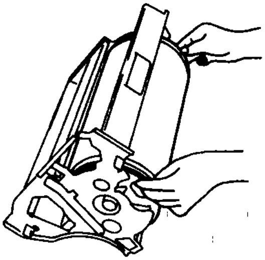
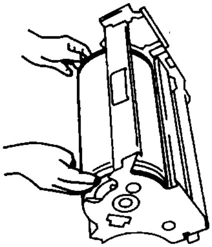
VI. INSTALLING THE DRUM HEATER

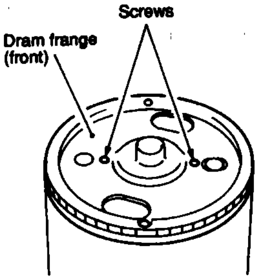
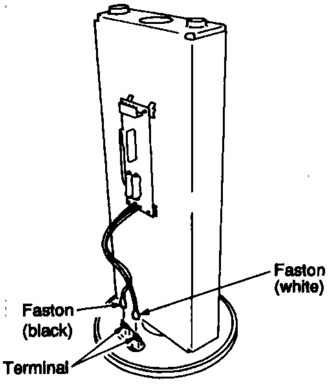
No.	Step	Remarks
1	Open the carton and check that the units shown below are available. ① Drum heater .... 1 unit ② Heater controller PCB .... 1 pc. ③ Locking support .... 4 pcs.	
2	Turn off the power switch, and disconnect the power plug.	
3	Open the front doors (left, right), and remove the screws to detach the hopper unit stoppers.	

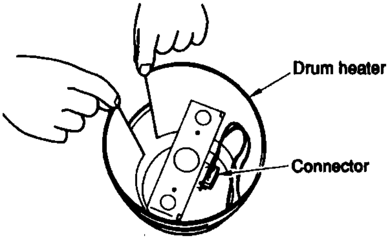
No.	Step	Remarks
4	Open the hopper unit fully. Thereafter, disconnect the connector of the primary corona assembly, and remove the screw; then, draw out the primary corona assembly.	 Connector Screw Primary corona assembly
5	Remove the transfer drum knob; then, remove the transfer assembly frame cover.	
6	Loosen the screw, and shift the cleaning blade releasing lever slowly to release position; then, tighten the screw while holding the lever in place.	 Blade release lever Screw Pressure Release

No.	Step	Remarks
7	Remove the screw, and detach the photosensitive drum cleaning unit. Remove the screw, and disconnect the connector; then, remove the pre-photosensitive drum cleaner paper sensor. (for future; TYPE 2 only)	 Cleaning unit Screw (TYPE 1)  Connector Pre-photosensitive drum cleaner paper sensor Screw (TYPE 2)
8	Disconnect the connector for the black toner density sensor, and remove the screw to detach the black toner density sensor.	 Connector Screw Black toner density sensor Screw Drum fixing spacer
9	Remove the screw to detach the photosensitive drum fixing spacer.	

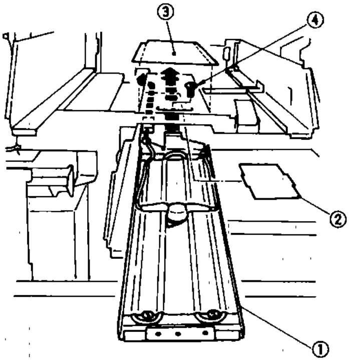
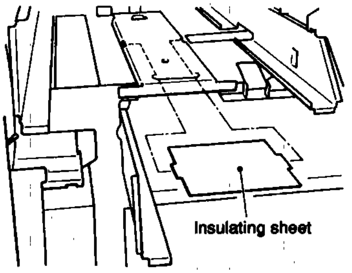
No.	Step	Remarks
10	Remove the three screws, and loosen the two fixing pins; then, pull out the photosensitive drum frame unit. **Caution:** ⚠ ① Make sure that the transfer unit is properly seated. ② When pulling out the photosensitive drum, take extra care so as to avoid damage to the drum.	 
11	Hold the grips, and place the photosensitive drum frame unit as shown.	

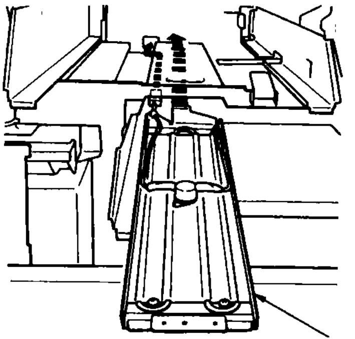
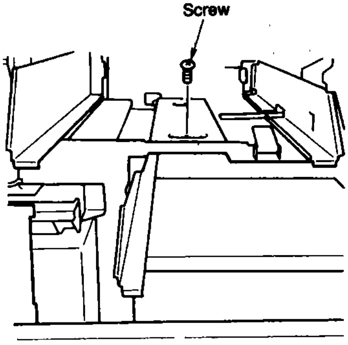
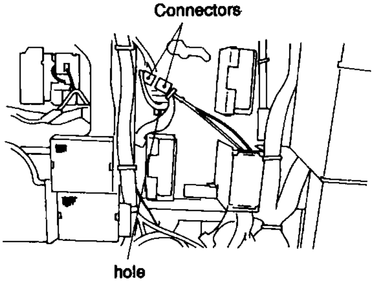
No.	Step	Remarks
12	Remove the six screws, and detach the photosensitive drum contact block (front, rear)	 Drum contact block Screws Drum contact block Screws
13	Pull out the photosensitive drum unit carefully. **Reference:** Put the hands as shown to facilitate removing the pho-tosensitive drum. **Caution:** ⚠ Put the photosensitive drum into the photosensitive drum frame unit while taking care not to damage it.	 

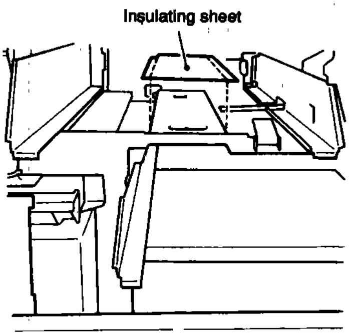
No.	Step	Remarks
14	Place the photosensitive drum so that the drum heater friction plate of the photosensitive drum unit is at the bottom.	
15	Remove the two screws, and remove the drum flange (front); then, remove the photosensitive drum. **Caution:** ⚠ Be sure to keep the photosensitive drum in a dark place, thereby protecting it from light.	
16	Attach the locking support and the drum heater controller PCB to the drum flange connecting plate.	
17	Insert the two fastons of the drum heater controller PCB into the terminal found on the drum flange (rear).	
18	Attach the photosensitive drum.	

No.	Step	Remarks
19	Insert the drum heater, and connect the connector of the drum heater controller PCB.	
20	Attach the drum flange (front).	
21	Put the photosensitive drum into the photosensitive drum frame unit; then, attach the contact block detached in step 12). **Caution:** ⚠ Put the photosensitive drum into the photosensitive drum frame unit while taking care not to damage it.	
22	Put the photosensitive drum frame unit into the copier; then, attach the photosensitive drum fixing spacer, and fix it in position using the screw removed in step 9). **Caution:** ⚠ Put the photosensitive drum into the photosensitive drum frame unit while taking care not to damage it.	
23	Attach the photosensitive cleaning unit and the black toner density sensor and the primary corona assembly; then, shift the cleaning blade releasing lever into locking position.	
24	After attaching the transfer drum knob and the transfer assembly frame cover, close the hopper; then, attach the hopper unit stopper, and close the front door. **Caution:** ⚠ Be sure to use the white faston on the outside electrode; use the black faston on the inside electrode.	

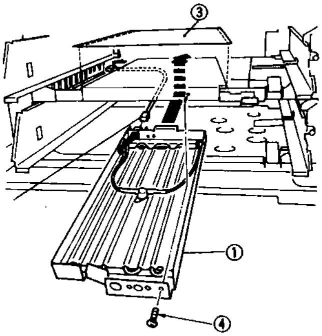
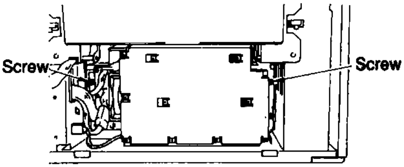
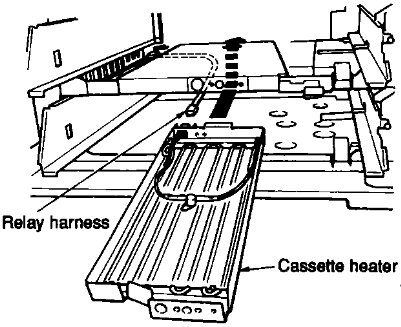
VII. INSTALLING THE CASSETTE HEATER (CLC700)

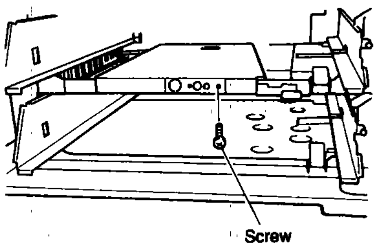
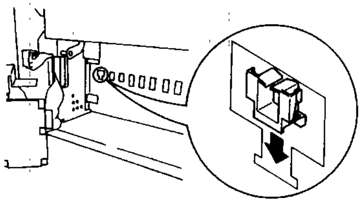
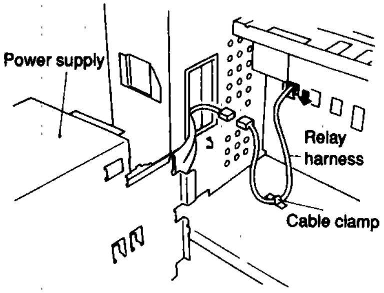
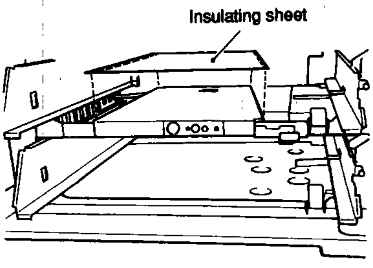
No.	Step	Remarks
1	Open the carton and check that the items shown below are available. ① Cassette heater........................1 unit ② Insulating sheet.........................1 pc. ③ Insulating sheet.........................1 pc. ④ Screw ....1 pc.	
2	Disconnect the power cord from the electrical outlet.	
3	Slide out the cassette 1 and the cassette 2.	
4	Remove the five screws, and detach the rear cover.	
5	Remove the screw, and open the DC controller PCB.	
6	Attach the insulating sheet along the stay of the cassette 1.	

No.	Step	Remarks
7	Insert the cassette heater into the hole at the rear of the stay in the cassette 1. At this time, be sure to lead the connector of the cassette heater through the hole in the copier's rear side plate.	
8	Fix the cassette heater in place on the stay in the cassette1 using a screw.	
9	Connect the connector of the cassette heater.	

No.	Step	Remarks
10	Attach the insulating sheet to the stay of the cassette 1.	
11	After closing the DC controller PCB and attaching the rear cover, slide in the cassette 1 and the cassette 2.	

VIII. INSTALLING THE CASSETTE HEATER (CLC800)

No.	Step	Remarks
1	Open the carton, and check that the items shown below are available. ① Cassette heater ....1 unit ② Relay harness ....1 pc. ③ Insulating sheet ....1 pc. ④ Screw ....1 pc. ⑤ Cable clamp ....1 pc. ⑥ Edge saddle (largbe, small) ......1 pc. each	
2	Disconnect the power cord from the electrical outlet.	
3	Slide out the cassettes 3 and 4.	
4	Remove the five screws, and detach the rear cover.	
5	Remove the two screws, and detach the left cover; then, remove the two screws, and pull out the power supply unit.	
6	Connect the relay harness to the cassette heater, and insert the cassette heater into the hole at the rear of the stay in the cassette 3. At this time, be sure to lead the connector of the cassette heater through the hole in the copier's left side plate.	

No.	Step	Remarks
7	Fix the cassette heater to the stay of the cassette using a screw from the copier's front	
8	Attach the edge saddle (large or small) as shown; select the saddle to suit the shape of the hole in the left side plate.	
9	Connect the connector of the cassette heater.	 Power supply Relay harness Cable clamp
10	Attach the insulating sheet to the stay of the cassette.	 Insulating sheet

No.	Step	Remarks
11	Attach the power unit and the left cover.	
12	Attach the rear cover; then, slide in the cassettes.	

I. PERIODICALLY REPLACED PARTS

As of Aug 1, 1996

No.	Parts name	Parts No.	Q'ty	Life (copies)	Remarks
1	Air filter (FM1)	FB2-0247-000	1	20,000	Or, 1yr.
2	Air filter (FM2)	FA6-0731-000	1	20,000	Or, 1yr.
3	Air filter (FM4)	FB2-4383-000	1	20,000	Or, 1yr.
4	Air filter (FM5)	FB2-0247-000	1	20,000	Or, 1yr.
5	Air filter (FM13)	FB2-4383-000	1	20,000	Or, 1yr.
6	Ozone filter (FM4)	FB2-4396-000	1	40,000	Or, 1yr.
7	Ozone filter (FM3)	FB2-4397-000	1	40,000	Or, 1yr.
8	Ozone filter (FM13)	FB2-4396-000	1	40,000	Or, 1yr.

Note:
The above values are estimates only and are subject to change based on future data.
The parts numbers may be updated to reflect the latest design revisions.

II. DURABLES AND CONSUMABLES

As of Aug 1, 1996

No.	Part name	Parts No.	Q'ty	Life	Remarks
1	Waste toner case	FY9-7006-000	1	20,000	Replaced by user
2	Cleaning blade (photosensitive drum cleaner)	FB2-0350-000	1	20,000	
3	Blade side seal (photosensitive drum cleaner)	FF5-2248-000	1	20,000	Edge felt (front)
4		FF5-2249-000	1	20,000	End felt (rear)
5	Scoop-up sheet (photosensitive drum cleaner)	FF5-3993-000	1	20,000	
6	Scoop-up sheet side sticker (photosensitive drum cleaner)	FF5-2246-000	1	20,000	End plastic sponge (front)
7		FF5-2247-000	1	20,000	End plastic sponge (rear)
8	Scanning lamp	FH7-3264-000	1	20,000	
9	Primary corona wire cleaning pad	FF2-3551-000	1	20,000	Upper; for low-humidity environment, 10,000
10		FF2-3552-000	1	20,000	Lower; for low-humidity environment, 10,000
11	Curl pressing sheet (duplexing unit)	FB2-6250-000	8	20,000	Two-sided copy counter reading
12	Fixing oil	FG5-3918-000	1	20,000	1.4L per supply 14K/1.0L
13	Multifeeder separation arm (separation pad)	FF5-2288-000	1	30,000	
14	Charging wire (primary, separation, internal and external static eliminating)	FY3-0040-000	AR	40,000	115/220/240 V; for low-humidity environment, 20,000
15	Grid wire (primary)	Y81-0162-000	1	40,000	For low-humidity environment, 20,000

No.	Parts name	Parts No.	Q'ty	Life	Remarks
16	No. 2 cleaner blade (photosensitive drum)	FB2-0421-000	2	40,000	Both edges (20,000/edge)
17	Starter developer (Bk)	F42-0402-000	1	40,000	
18	Starter developer (C)	F42-0412-000	1	40,000	
19	Starter developer (M)	F42-0422-000	1	40,000	
20	Starter developer (Y)	F42-0423-000	1	40,000	
21	Retention brush unit	FG5-5841-000	1	40,000	
22	Transfer brush unit	FG5-5842-000	1	40,000	
23	Transfer cleaner brush	FA4-8874-000	1	40,000	
24	Oil removing roller (transfer drum assembly)	FB2-0661-000	1	40,000	Two-sided copy counter reading
25	Polishing roller (transfer drum assembly)	FB2-0587-000	1	40,000	
26	Lower fixing roller	FB2-1084-000	1	40,000	Or, in 1 yr. After installation.
27	Upper fixing roller	FB2-1080-000	1	60,000	
28	Transfer drum sheet	FB2-0525-000	1	60,000	
29	Oil applying roller (fixing assembly)	FB2-1143-000	1	60,000	
30	Cleaning belt (fixing assembly)	FB2-3482-000	1	60,000	
31	Multifeeder pick-up roller	FF5-2287-000	1	60,000	
32	Scraper (1)	FF5-2170-000	2	60,000	TYPE1
		FF5-4010-000	2	60,000	TYPE2
33	Oil applying blade (fixing assembly)	FB2-6305-030	1	100,000	
34	Oil removing blade (fixing assembly)	FB3-2047-000	1	100,000	Use one edge only

No.	Parts name	Parts No.	Q'ty	Life	Remarks	
35	Fixing heater (lower; fixing assembly)	FH7-4409-000	1	100,000	115V	Or, 1yr. after installation.
36		FH7-4410-000	1	100,000	220V/240V	
37	Fixing heater (lower; fixing assembly)	FH7-4409-000	1	100,000	115V	Or, 1yr. after installation.
38		FH7-4410-000	1	100,000	220V/240V	
39	Pick-up roller (duplexing unit)	FF5-2101-000	1	100,000	Two-sided copy counter reading (front)	
40		FF5-2102-000	1	100,000	Two-sided copy counter reading (rear)	
41	Feeding roller 1 (duplexing unit)	FF5-2103-000	1	100,000	Two-sided copy counter reading	
42	Separation roller (duplexing unit)	FF5-2104-000	1	100,000	Two-sided copy counter reading	
43	Feeding roller (duplexing unit)	FF5-2101-000	1	100,000	Two-sided counter reading (front)	
44		FF5-2102-000	1	100,000	Two-sided counter reading (rear)	
45	Feeding roller (duplexing unit)	FF5-2274-000	2	100,000	Two-sided counter reading	
46	Scraper (2)	FF5-2171-000	1	100,000		
47	Scraper (3)	FF5-2259-000	1	100,000		
48	Transfer cleaner motor (w/ mounting plate)	FG5-8298-000	1	100,000	If the old type motor (FH6-1018) is installed, replace it together with the mounting plate with the indicated part (left). (Once done, the motor need not be replaced until the end of the machine life.)	
49	Cassette pick-up roller (pick-up assembly)	FF5-1220-000	CLC700:2 CLC800:3	120,000	Rear	
50		FF5-1221-000	CLC700:2 CLC800:3	120,000	Front	

No.	Parts name	Parts No.	Q'ty	Life	Remarks
51	Cassette feeding roller (pick-up assembly)	FB1-7061-000	CLC700:4 CLC800:6	120,000	
52	Cassette separation roller (pick-up assembly)	FB1-7060-000	CLC700:4 CLC800:6	120,000	
53	Pre-exposure lamp	FH7-3266-000	1	150,000	

Note:
The above values are estimates only and are subject to change based on future data.

III. PERIODICAL SERVICING CHART

Caution:
Do not use solvents or oils other than those mentioned.

△ : Clean ● : Replace x : Lubricate ☐ : Adjust ◎ : Inspect

As of Aug 1, 1996

Unit	Parts	Servicing intervals			Remarks
		every 20,000	every 40,000	every 60,000	
Externals	Copyboard glass	△			Alcohol
	Copyboard cover	△			
	Ozone filter (3 locations)	●			Or, 1 yr.
	Air filter (5 locations)	●			Or, 1 yr.
	Retention roller spring clutch	X			Lubricant
	Spring clutch		X		
Pick-up feeding	Retention roller	△			Remove the retention roller unit to clean.
	Retention roller cleaner	△			
	Retention smoothing roller	△			
	Retention smoothing roller cleaner	△			
	Retention push-up roll	△			Solvent
	Retention unit swing arm	△			
	Pick-up/feeding/separation roller (pick-up assembly)		△		
	Feeding belt		△		Be sure to clean the back of the belt also.
Transfer drum	Transfer drum cleaner	△			
	Oil removing roller		●		Two-sided copy counter reading
	Polishing roller		●		
	Transfer sheet scraper			△	At time of replacing the transfer sheet.
	Transfer drum sheet	△		●	Dry wipe.

△ : Clean ● : Replace x : Lubricate ☐ : Adjust ◎ : Inspect

Unit	Parts	Servicing intervals			Remarks
		every 20,000	every 40,000	every 60,000	
Corona system	Corona wire (primary)*	△	●		Dry wipe with lint-free paper; then, clean with alcohol. (Do not use water; make sure they are completely dry before attachment.) *If in a normal temperature and low-humidity environment, clean the corona wire for every 10,000 copies and replace it for every 20,000 copies by way of providing maintenance.
	Corona wire (separation)*	△	●		
	Corona wire (external static eliminator)*	△	●		
	Corona wire (internal static eliminator)*	△	●		
	Retention smoothing brush		●		
	Transfer brush		●		
	Grid wire (primary)	△	●		
	Shielding plate, block*	△			
	Primary charging wire cleaning pad	●			If in a low-humidity environment, replace for every 10,000 copies.
photosensitive drum	NO. 2 cleaning blade	△			
	Black toner density sensor	△			Dry wipe.
	Filter (pre-exposure lamp)	△			Use blower brush.
	Photosensitive drum butting block		△		Solvent At time of replacing the photosensitive drum.
	Pre-Photosensitive drum paper sensor	△			Clean with a cotton wad.
Developing assembly	Photosensitive drum butting block		△		Use solvent; at time of replacing drum.
Fixing assembly	Separation claw	△			Use solvent.
	Inlet guide	△			
	Outlet guide	△			
	Blade (lower roller)	△			Use lint-free paper.
	Blade (upper roller oil application)	△			
	Thermistor	△			Use lint-free paper.

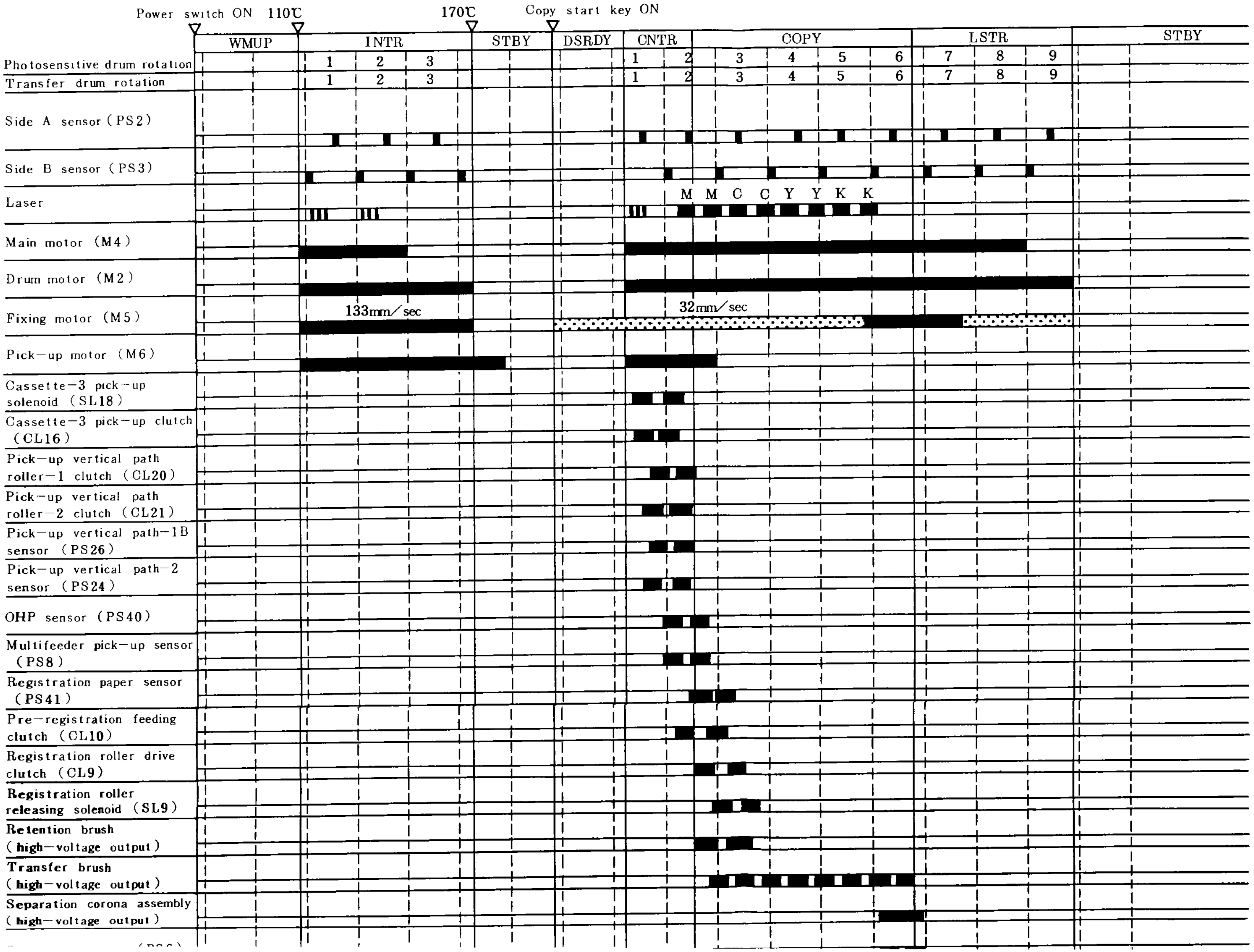
△ : Clean ● : Replace x : Lubricate ☐ : Adjust ◎ : Inspect

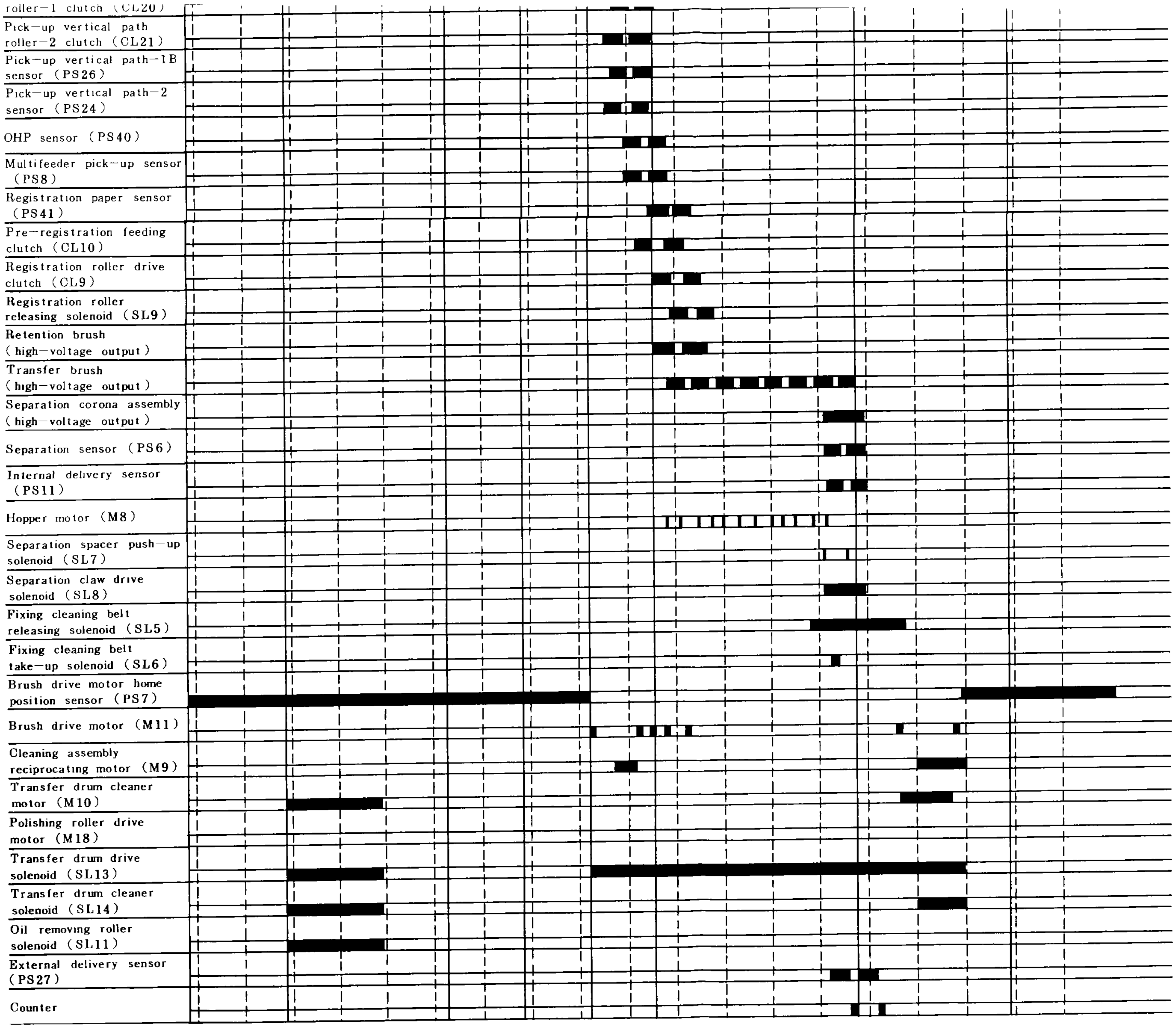
Unit	Part	Servicing intervals			Remarks
		every 20,000	every 40,000	every 60,000	
Scanning system	No. 1 through No. 3 mirrors	△			Use blower brush. (Note 1)
	Reflector (scanning lamp)	△			
	Scanner rail	△x			Clean with alcohol; then, apply lubricant.
Laser exposure system	Dust-proof glass				Use lint-free paper as necessary. (Note 2)
Others	Hopper toner dish	△			Dispose of the collection of toner.

Note 1: Take care not to touch the mirrors and lenses; further, keep the CCD free of dust.
Note 2: Do not touch the laser mirror, and take care not to damage it.

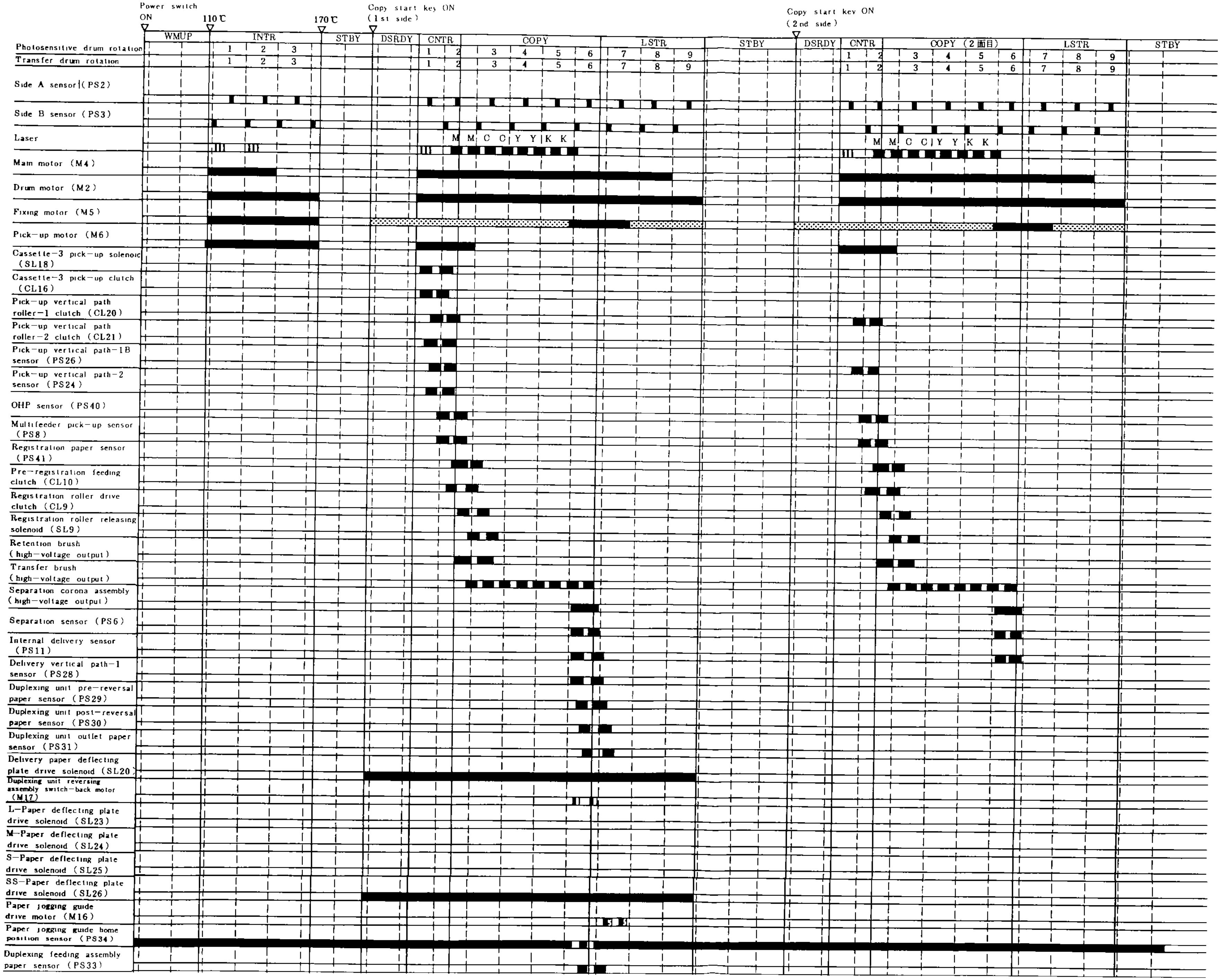
A. GENERAL TIMING CHART

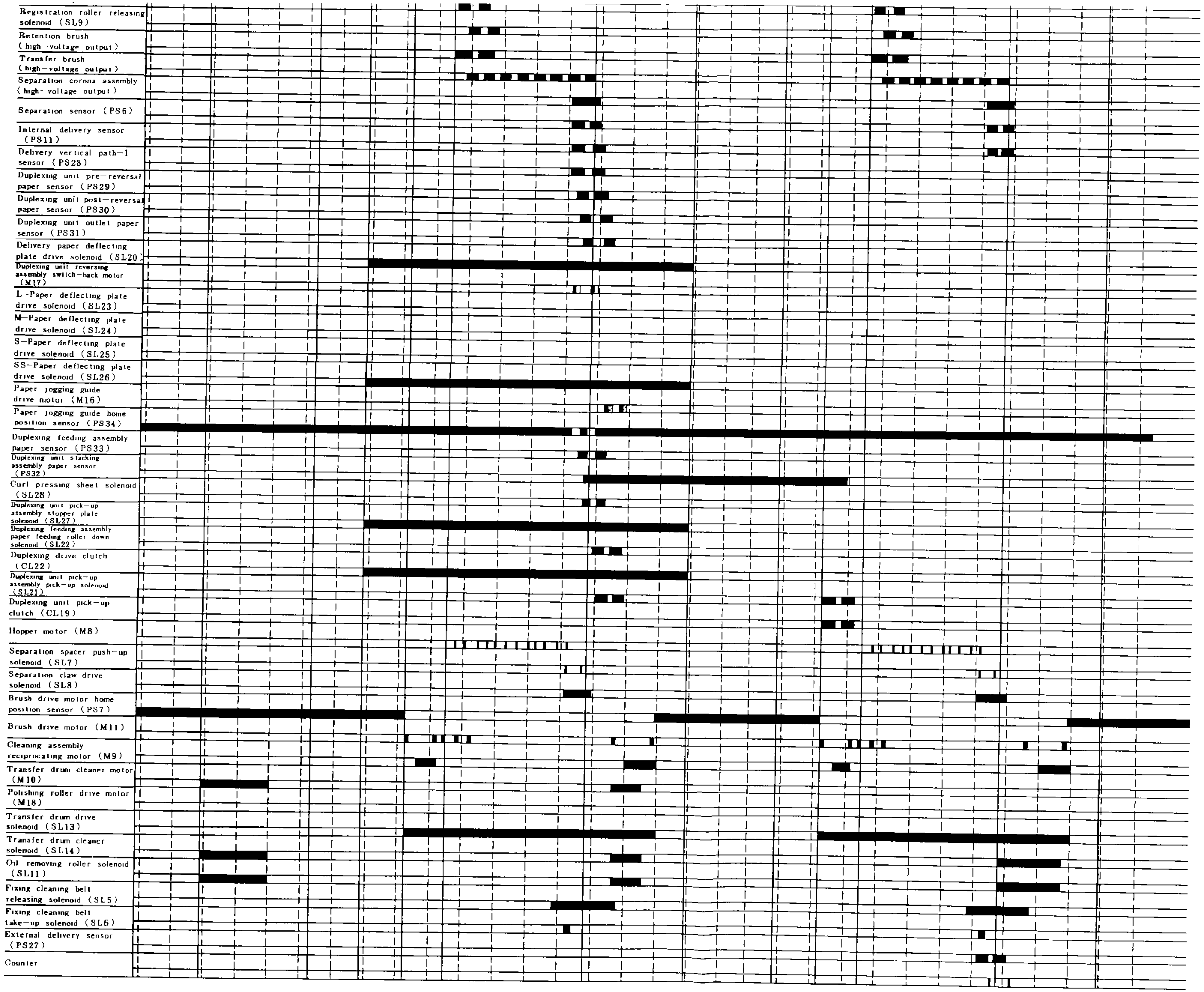
A4/Letter, 2 copies, 4 colors, DIRECT, one-sided, pick-up from cassette 3


Power switch ON
110℃
170℃
Copy start key ON
WMUP
INTR
STBY
DSRDY
CNTR
COPY
LSTR
STBY
Photosensitive drum rotation
Transfer drum rotation
1 2 3
1 2 3 4 5 6 7 8 9
Side A sensor (PS2)
Side B sensor (PS3)
Laser
M M C C Y Y K K
Main motor (M4)
Drum motor (M2)
Fixing motor (M5)
133mm/sec
32mm/sec
Pick-up motor (M6)
Cassette-3 pick-up solenoid (SL18)
Cassette-3 pick-up clutch (CL16)
Pick-up vertical path roller-1 clutch (CL20)
Pick-up vertical path roller-2 clutch (CL21)
Pick-up vertical path-1B sensor (PS26)
Pick-up vertical path-2 sensor (PS24)
OHP sensor (PS40)
Multifeeder pick-up sensor (PS8)
Registration paper sensor (PS41)
Pre-registration feeding clutch (CL10)
Registration roller drive clutch (CL9)
Registration roller releasing solenoid (SL9)
Retention brush (high-voltage output)
Transfer brush (high-voltage output)
Separation corona assembly (high-voltage output)


roller-1 clutch (CL20)
Pick-up vertical path roller-2 clutch (CL21)
Pick-up vertical path-1B sensor (PS26)
Pick-up vertical path-2 sensor (PS24)
OHP sensor (PS40)
Multifeeder pick-up sensor (PS8)
Registration paper sensor (PS41)
Pre-registration feeding clutch (CL10)
Registration roller drive clutch (CL9)
Registration roller releasing solenoid (SL9)
Retention brush (high-voltage output)
Transfer brush (high-voltage output)
Separation corona assembly (high-voltage output)
Separation sensor (PS6)
Internal delivery sensor (PS11)
Hopper motor (M8)
Separation spacer push-up solenoid (SL7)
Separation claw drive solenoid (SL8)
Fixing cleaning belt releasing solenoid (SL5)
Fixing cleaning belt take-up solenoid (SL6)
Brush drive motor home position sensor (PS7)
Brush drive motor (M11)
Cleaning assembly reciprocating motor (M9)
Transfer drum cleaner motor (M10)
Polishing roller drive motor (M18)
Transfer drum drive solenoid (SL13)
Transfer drum cleaner solenoid (SL14)
Oil removing roller solenoid (SL11)
External delivery sensor (PS27)
Counter

A4 Letter, 2 copies, 4 colors, DIRECT, two-sided, pick-up from cassette 3


Power switch ON
110℃
170℃
Copy start key ON (1st side)
Copy start key ON (2nd side)
WMUP
INTR
STBY
DSRDY
CNTR
COPY
LSTR
STBY
DSRDY
CNTR
COPY (2面目)
LSTR
STBY
Photosensitive drum rotation
Transfer drum rotation
Side A sensor (PS2)
Side B sensor (PS3)
Laser
M M C C Y Y K K
Main motor (M4)
Drum motor (M2)
Fixing motor (M5)
Pick-up motor (M6)
Cassette-3 pick-up solenoid (SL18)
Cassette-3 pick-up clutch (CL16)
Pick-up vertical path roller-1 clutch (CL20)
Pick-up vertical path roller-2 clutch (CL21)
Pick-up vertical path-1B sensor (PS26)
Pick-up vertical path-2 sensor (PS24)
OHP sensor (PS40)
Multifeeder pick-up sensor (PS8)
Registration paper sensor (PS41)
Pre-registration feeding clutch (CL10)
Registration roller drive clutch (CL9)
Registration roller releasing solenoid (SL9)
Retention brush (high-voltage output)
Transfer brush (high-voltage output)
Separation corona assembly (high-voltage output)
Separation sensor (PS6)
Internal delivery sensor (PS11)
Delivery vertical path-1 sensor (PS28)
Duplexing unit pre-reversal paper sensor (PS29)
Duplexing unit post-reversal paper sensor (PS30)
Duplexing unit outlet paper sensor (PS31)
Delivery paper deflecting plate drive solenoid (SL20)
Duplexing unit reversing assembly switch-back motor (M17)
L-Paper deflecting plate drive solenoid (SL23)
M-Paper deflecting plate drive solenoid (SL24)
S-Paper deflecting plate drive solenoid (SL25)
SS-Paper deflecting plate drive solenoid (SL26)
Paper jogging guide drive motor (M16)
Paper jogging guide home position sensor (PS34)
Duplexing feeding assembly paper sensor (PS33)


Registration roller releasing solenoid (SL9)
Retention brush (high-voltage output)
Transfer brush (high-voltage output)
Separation corona assembly (high-voltage output)
Separation sensor (PS6)
Internal delivery sensor (PS11)
Delivery vertical path-1 sensor (PS28)
Duplexing unit pre-reversal paper sensor (PS29)
Duplexing unit post-reversal paper sensor (PS30)
Duplexing unit outlet paper sensor (PS31)
Delivery paper deflecting plate drive solenoid (SL20)
Duplexing unit reversing assembly switch-back motor (M17)
L-Paper deflecting plate drive solenoid (SL23)
M-Paper deflecting plate drive solenoid (SL24)
S-Paper deflecting plate drive solenoid (SL25)
SS-Paper deflecting plate drive solenoid (SL26)
Paper jogging guide drive motor (M16)
Paper jogging guide home position sensor (PS34)
Duplexing feeding assembly paper sensor (PS33)
Duplexing unit stacking assembly paper sensor (PS32)
Curl pressing sheet solenoid (SL28)
Duplexing unit pick-up assembly stopper plate solenoid (SL27)
Duplexing feeding assembly paper feeding roller down solenoid (SL22)
Duplexing drive clutch (CL22)
Duplexing unit pick-up assembly pick-up solenoid (SL21)
Duplexing unit pick-up clutch (CL19)
Hopper motor (M8)
Separation spacer push-up solenoid (SL7)
Separation claw drive solenoid (SL8)
Brush drive motor home position sensor (PS7)
Brush drive motor (M11)
Cleaning assembly reciprocating motor (M9)
Transfer drum cleaner motor (M10)
Polishing roller drive motor (M18)
Transfer drum drive solenoid (SL13)
Transfer drum cleaner solenoid (SL14)
Oil removing roller solenoid (SL11)
Fixing cleaning belt releasing solenoid (SL5)
Fixing cleaning belt take-up solenoid (SL6)
External delivery sensor (PS27)
Counter

B. LIST OF SIGNALS AND ABBREVIATIONS

1. SIGNALS

A-LEG	A-SIDE SENSOR signal
B-LEG	B-SIDE SENSOR signal
BK-SGNL	BK-TONER DENSITY SENSOR signal
BK-REF	BK-TONER LEVEL SENSOR signal
BMTRHP	BRUSH LOCKING/RELEASING MOTOR HP SENSOR signal
C-SGNL	C-TONER DENSITY SENSOR signal
C1LFU	CASSETTE-1 LIFTER SENSOR signal
C1PD	CASSETTE-1 PAPER SENSOR signal
C1PW	CASSETTE-1 PAPER WIDTH VR signal
C2LFU	CASSETTE-2 LIFTER SENSOR signal (CLC700)
C2PD	CASSETTE-2 PAPER SENSOR signal (CLC700)
C2PUDC	CASSETTE-2 PICK-UP ASSEMBLY DOOR SWITCH signal (CLC700)
C2PW	CASSETTE-2 PAPER WIDTH VR signal (CLC700)
C2SZ0 (LEFT)	CASSETTE-2 PAPER LENGTH SENSOR UNIT signal 0 (CLC700)
C2SZ1 (RIGHT)	CASSETTE-2 PAPER LENGTH SENSOR UNIT signal 1 (CLC700)
C3LFU	CASSETTE-3 LIFTER SENSOR signal (CLC800)
C3PD	CASSETTE-3 PAPER SENSOR signal (CLC800)
C3PW	CASSETTE-3 PAPER WIDTH VR signal (CLC800)
C3SZ0 (LEFT)	CASSETTE-3 PAPER LENGTH SENSOR UNIT signal 0 (CLC800)
C3SZ1 (RIGHT)	CASSETTE-3 PAPER LENGTH SENSOR UNIT signal 1 (CLC800)
C4LFU	CASSETTE-4 LIFTER SENSOR signal (CLC800)
C4PD	CASSETTE-4 PAPER SENSOR signal (CLC800)
C4PW	CASSETTE-4 PAPER WIDTH VR signal (CLC800)
C4SZ0 (LEFT)	CASSETTE-4 PAPER LENGTH SENSOR UNIT signal 0 (CLC800)
C4SZ1 (RIGHT)	CASSETTE-4 PAPER LENGTH SENSOR UNIT signal 1 (CLC800)
CL1D* (DEV_M_CL)	M-DEVELOPING CYLINDER CLUTCH command
CL2D* (DEV_C_CL)	C-DEVELOPING CYLINDER CLUTCH command
CL3D* (DEV_Y_CL)	Y-DEVELOPING CYLINDER CLUTCH command
CL4D* (DEV_BK_CL)	BK-DEVELOPING CYLINDER CLUTCH command
CL5D* (TONER_M)	M-TONER SUPPLY CLUTCH command
CL6D* (TONER_C)	C-TONER SUPPLY CLUTCH command
CL7D* (TONER_Y)	Y-TONER SUPPLY CLUTCH command
CL8D* (TONER_BK)	BK-TONER SUPPLY CLUTCH command
CL9D*	REGISTRATION ROLLER DRIVE CLUTCH command
CL10D*	PRE-REGISTRATION FEEDER CLUTCH command
CL11D*	PRE-REGISTRATION ROLLER 2 CLUTCH command
CL12D* (MF_CL)	MULTIFEEDER PICK-UP CLUTCH command

CL13D* (C1_PF_CL)	CASSETTE-1 PICK-UP CLUTCH command
CL14D* (C2_PF_CL)	CASSETTE-2 PICK-UP CLUTCH command (CLC700)
CL15D*	VERTICAL PATH-1 CLUTCH command (CLC700)
CL16D* (C3_PF_CL)	CASSETTE-3 PICK-UP CLUTCH command (CLC800)
CL17D* (C4_PF_CL)	CASSETTE-4 PICK-UP CLUTCH command (CLC800)
CL18D*	VERTICAL PATH-3 CLUTCH command (CLC800)
CL19D* (RE_PF_CL)	DUPLEXING PICK-UP CLUTCH command (CLC800)
CL20D*	VERTICAL PATH-1 CLUTCH command (CLC800)
CL21D*	VERTICAL PATH-2 CLUTCH command (CLC700)
CL22D*	DUPLEXING DRIVE CLUTCH command (CLC800)
CL23D*	DELIVERY VERTICAL PATH-2 CLUTCH command (CLC800)
CNT1D*	COUNTER-2 command
CNT2D*	COUNTER-2 command
CNT3D*	COUNTER-3 command
CNT4D*	COUNTER-4 command
CTEP*	C-TONER LEVEL SENSOR signal
DELDC	DELIVERY DOOR SENSOR signal
DRHOFF	DRUM HEATER command
DRUMHP	PHOTOSENSITIVE DRUM HOME POSITION SENSOR signal
FM1D*	SCANNING LAMP COOLING FAN-1 command
FM2D*	PRIMARY CORONA ASSEMBLY EXHAUST FAN command
FM3D*	FIXING EXHAUST FAN command
FM4D*	OZONE SUCTION FAN-1 command
FM5D*	SCANNING LAMP COOLING FAN-2 command
FM6D*	SCANNING LAMP COOLING FAN-3 command
FM7D*	SCANNING LAMP COOLING FAN-4 command
FM8D*	POWER SUPPLY COOLING FAN command
FM9D*	IP COOLING FAN command
FM10D*	POWER UNIT FAN-1 command
FM12D*	DEVELOPING BIAS PCB COOLING FAN command
FM13D*	OZONE SUCTION FAN-2 command
FM14D*	FEEDER FAN-1 command
FM15-D*	FEEDER FAN-2 command
HUM	ENVIRONMENT SENSOR HUMIDITY signal
HVATC	ATTRACTION BRUSH ON/OFF CONTROL signal
HVATI	ATTRACTION BRUSH LEVEL CONTROL signal
HVGI	GRID BIAS LEVEL CONTROL signal
HVPR*	PRIMARY CORONA CURRENT ON/OFF signal
HVSPC	SEPARATION CORONA ON/OFF CONTROL signal
HVSPI	SEPARATION CORONA LEVEL CONTROL signal
HVTRC	TRANSFER CORONA ON/OFF CONTROL signal
HVTRI	TRANSFER CORONA LEVEL CONTROL signal

I-REM	INTERNAL STATIC ELIMINATOR ON/OFF CONTROL signal
KEYSW	KEY SWITCH signal
LAON*	SCANNING LAMP ON signal
LA2ON*	PRE-EXPOSURE LAMP ON signal
LDC (LEFT_TDR)	LEFT DOOR SENSOR signal
M-SGNL	M-TONER DENSITY SENSOR signal
M2CLK	DRUM MOTOR ROTATION SPEED signal
M2ON* (DRMD)	DRUM MOTOR command
M2RDY* (DRMRDY)	DRUM MOTOR READY signal
M2SPD0	DRUM MOTOR SPEED CONTROL signal 0
M2SPD1	DRUM MOTOR SPEED CONTROL signal 1
M3IDL (LSMSPD)	LASER SCANNER MOTOR IDLE signal
M3ON* (LSMD)	LASER SCANNER MOTOR command
M3RDY* (LSMRDY)	LASER SCANNER MOTOR READY signal
M40N* (MMON)	MAIN MOTOR command
M4RDY* (MMRDY)	MAIN MOTOR READY signal
M5ON* (FXMD)	FIXING MOTOR command
M5RDY* (FXMRDY)	FIXING MOTOR READY signal
M5SPD0	FIXING MOTOR SPEED CONTROL signal 0
M5SPD1	FIXING MOTOR SPEED CONTROL signal 1
M6ON*	PICK-UP MOTOR command
M6RDY*	PICK-UP MOTOR READY signal
M7FW (M7D1)	PRIMARY CORONA WIRE CLEANING MOTOR NORMAL DRIVE command
M7RV (M7D0)	PRIMARY CORONA WIRE CLEANING MOTOR REVERSE DRIVE command
M8D(+)/M8D(–)	HOPPER MOTOR command
M9D(+)/M9D(–)	CLEANING ASSEMBLY RECIPROCATING MOTOR command
M10ON* (TDCLAMD)	TRANSFER DRUM CLEANER MOTOR command
M11_A/M11_B	BRUSH LOCKING/RELEASING MOTOR command
M12ON	CASSETTE1 LIFTER MOTOR command
M13ON	CASSETTE2 LIFTER MOTOR command (CLC700)
M14ON	CASSETTE3 LIFTER MOTOR command (CLC800)
M15ON	CASSETTE4 LIFTER MOTOR command (CLC800)
M16_A/M16_B	PAPER JOGGING GUIDE DRIVE MOTOR command (CLC800)
M17_A/M17_B	DUPLEXING UNIT REVERSING ASSEMBLY SWITCH-BACK MOTOR command (CLC800)
M18_A/M18_B (M18ON)	POLISHING ROLLER DRIVE MOTOR command
MFPD	MULTIFEEDER PAPER SENSOR signal
MFPPD*	MULTIFEEDER PICK-UP SENSOR signal
MFPW	MULTIFEEDER PAPER WIDTH VR signal
MTEP*	M-TONER LEVEL SENSOR signal

O-REM	EXTERNAL STATIC ELIMINATER ON/OFF CONTROL signal
OEP* (OILEP)	OIL LEVEL SENSOR signal
OHPD (OHP)	OHP SENSOR signal
PGHP	PAPER JOGGING GUIDE HOME POSITION SENSOR signal (CLC800)
PS4D (TRNS_1)	PRE-TRANSFER PAPER SENSOR signal
PS5D (TRNS_2)	POST-TRANSFER PAPER SENSOR signal
PS6D (SPRT)	SEPARATION SENSOR signal
PS11D (DLVRY_I)	INTERNAL DELIVERY SENSOR signal
PS19D	PICK-UP VERTICAL PATH-1 SENSOR signal (CLC700)
PS24D	PICK-UP VERTICAL PATH-2 SENSOR signal (CLC800)
PS25D	PICK-UP VERTICAL PATH-3 SENSOR signal (CLC800)
PS26D	PICK-UP VERTICAL PATH-1B SENSOR signal (CLC800)
PS27D (DLVRY_O)	EXTERNAL DELIVERY SENSOR signal
PS28D	DELIVERY VERTICAL PATH SENSOR signal (CLC800)
PS29D (REV_BF)	DUPLEXING UNIT PRE-REVERSAL PAPER signal SENSOR (CLC800)
PS30D (REV_AFT)	DUPLEXING UNIT POST-REVERSAL PAPER SENSOR signal (CLC800)
PS31D (REV_EXIT)	DUPLEXING UNIT REVERSAL OUTLET PAPER SENSOR signal (CLC800)
PS32D (DUP_PD)	DUPLEXING UNIT STACKING ASSEMBLY PAPER SENSOR signal (CLC800)
PS33D	DUPLEXING UNIT FEEDER PAPER SENSOR signal (CLC800)
PS39D	DUPLEXING UNIT REVERSING ASSEMBLY DOOR SENSOR signal (CLC800)
PS41D (RGST)	REGISTRATION PAPER SENSOR signal
RS43D (FOR FUTURE, TYPE 2 ONLY)	PRE-PHOTOSENSITIVE DRUM PAPER SENSOR signal
PWOFF	MAIN SWITCH signal
RDC (RGHT_DR)	RIGHT DOOR SENSOR signal
RVDC (REV_DR)	DUPLEXING UNIT REVERSING ASSEMBLY DOOR SWITCH signal (CLC800)
RVPUDC (FEED_DR)	DUPLEXING UNIT PICK-UP DOOR SWITCH signal (CLC800)
SCHP	SCANNER HOME POSITION SENSOR signal
SL1D*	M-DEVELOPING ASSEMBLY ENGAGING SOLENOID command
SL2D*	C-DEVELOPING ASSEMBLY ENGAGING SOLENOID command
SL3D*	Y-DEVELOPING ASSEMBLY ENGAGING SOLENOID command
SL4D*	K-DEVELOPING ASSEMBLY ENGAGING SOLENOID command
SL5D* (WEB_SWNG)	CLEANING WEB RELEASING SOLENOID command
SL6D* (WEB_WIND)	CLEANING WEB TAKE-UP SOLENOID command
SL7D*	SEPARATION SPACER PUSH-UP SOLENOID command
SL8D* (SPRT)	SEPARATION CLAW DRIVE SOLENOID command
SL9D*	REGISTRATION ROLLER RELEASING SOLENOID command
SL10D*	RETENTION GUIDE DRIVE SOLENOID command
SL11D* (OIL_CLRR)	OIL REMOVING ROLLER SOLENOID command

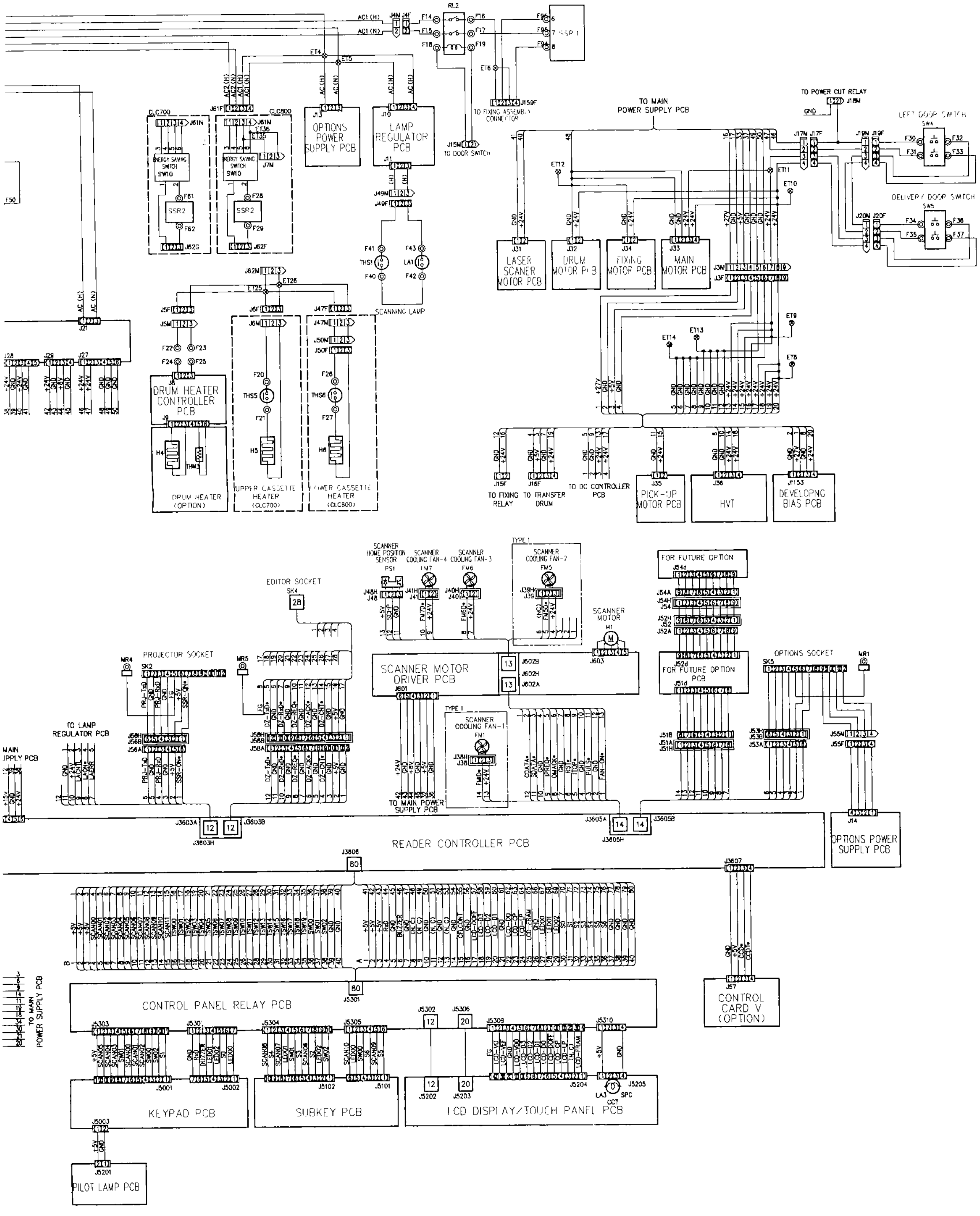
SL12D* (OIL_PMP)	OIL PUMP DRIVE SOLENOID command
SL13D*	TRANSFER DRUM LOCKING/RELEASING SOLENOID command
SL14D*	TRANSFER DRUM CLEANER SOLENOID command
SL15D*	MULTIFEEDER PICK-UP SOLENOID command
SL16D* (C1_PU_SL)	CASSETTE-1 PICK-UP SOLENOID command
SL17D* (C2_PU_SL)	CASSETTE-2 PICK-UP SOLENOID command (CLC700)
SL18D* (C3_PU_SL)	CASSETTE-3 PICK-UP SOLENOID command (CLC800)
SL19D* (C4_PU_SL)	CASSETTE-4 PICK-UP SOLENOID command (CLC800)
SL20D* (DEL_FLP)	DELIVERY PAPER DEFLECTOR DRIVE SOLENOID command (CLC800)
SL21D* (DU_PU_SL)	ASSEMBLY PICK-UP SOLENOID command (CLC800)
SL22D*	DUPLEXING UNIT PICK-UP ASSEMBLY PAPER FEEDING ROLLER SOLENOID command
SL23D* (DP_L_FLP)	L-PAPER DEFLECTOR DRIVE SOLENOID command (CLC800)
SL24D* (DP_M_FLP)	M-PAPER DEFLECTOR DRIVE SOLENOID command (CLC800)
SL25D* (DP_S_FLP)	S-PAPER DEFLECTOR DRIVE SOLENOID command (CLC800)
SL26D* (DP_SS_FLP)	SS-PAPER DEFLECTOR DRIVE SOLENOID command (CLC800)
SL27DD	DUPLEXING UNIT PICK-UP ASSEMBLY STOP PLATE DRIVE SOLENOID DOWN command
SL27DU	DUPLEXING UNIT PICK-UP ASSEMBLY STOP PLATE DRIVE SOLENOID UP command
SL28D*	CURL PRESSING SHEET SOLENOID command
TEMP	ENVIRONMENT SENSOR TEMPERATURE signal
THM1	UPPER FIXING ROLLER TEMPERATURE signal
THM2	LOWER FIXING ROLLER TEMPERATURE signal
UHON	UPPER FIXING HEATER command
WEBD	FIXING ROLLER CLEANING WEB SENSOR signal
WTBD	WASTE TONER FEEDING SCREW LOCK DETECTING SWITCH signal
WTONER	WASTE TONER FULL SENSOR signal
Y-SGNL	Y-TONER DENSITY SENSOR signal
YTEP*	Y-TONER LEVEL SENSOR signal

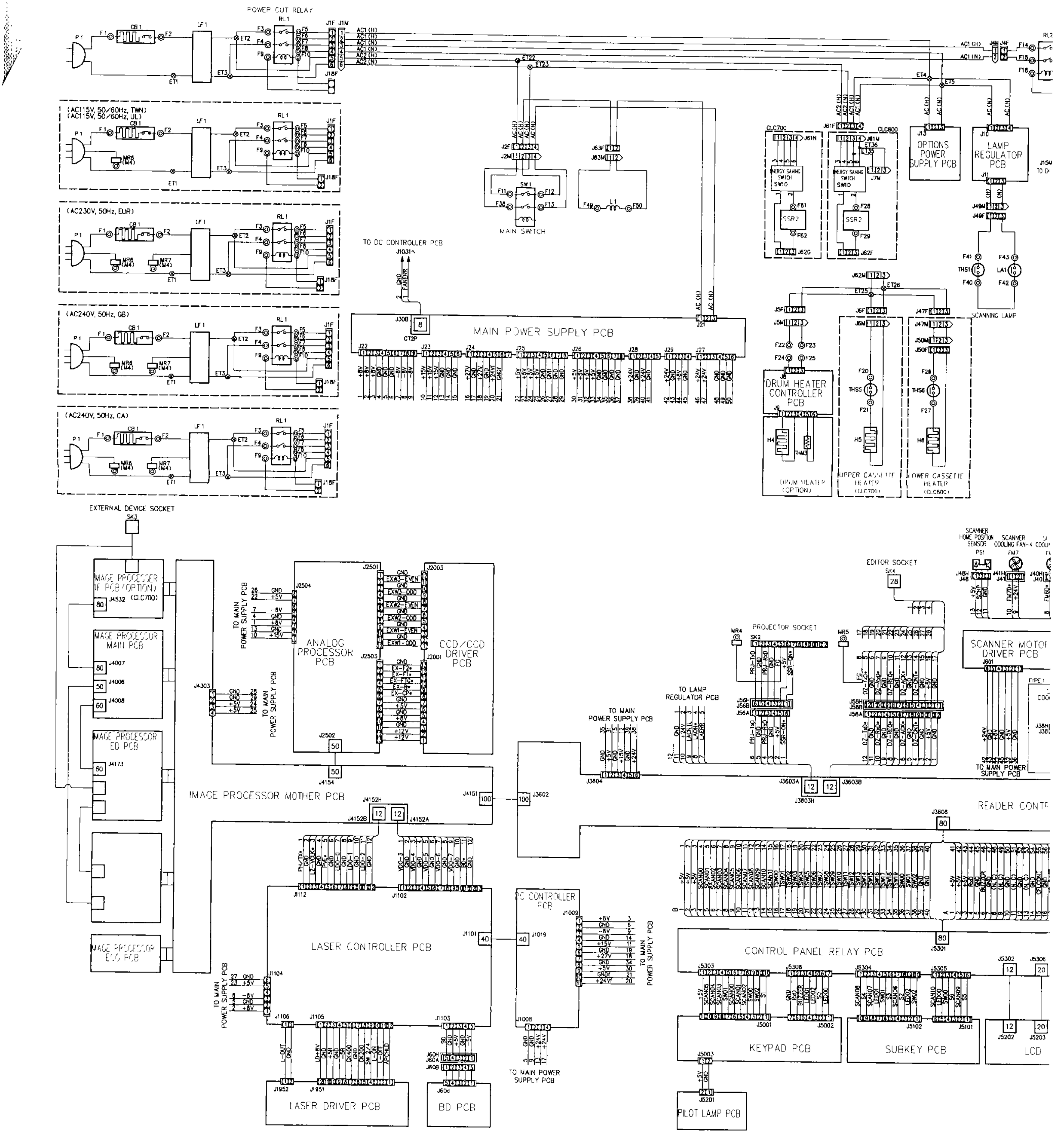
2. LIST OF ABBREVIATIONS

CNTR	CONTROL ROTATION
COPY	COPY
DSRDY	SCANNER READY
INTR	INITIAL ROTATION
LSTR	LAST ROTATION
STBY	STANDBY
WMPU	WARM UP

C. GENERAL CIRCUIT DIAGRAM

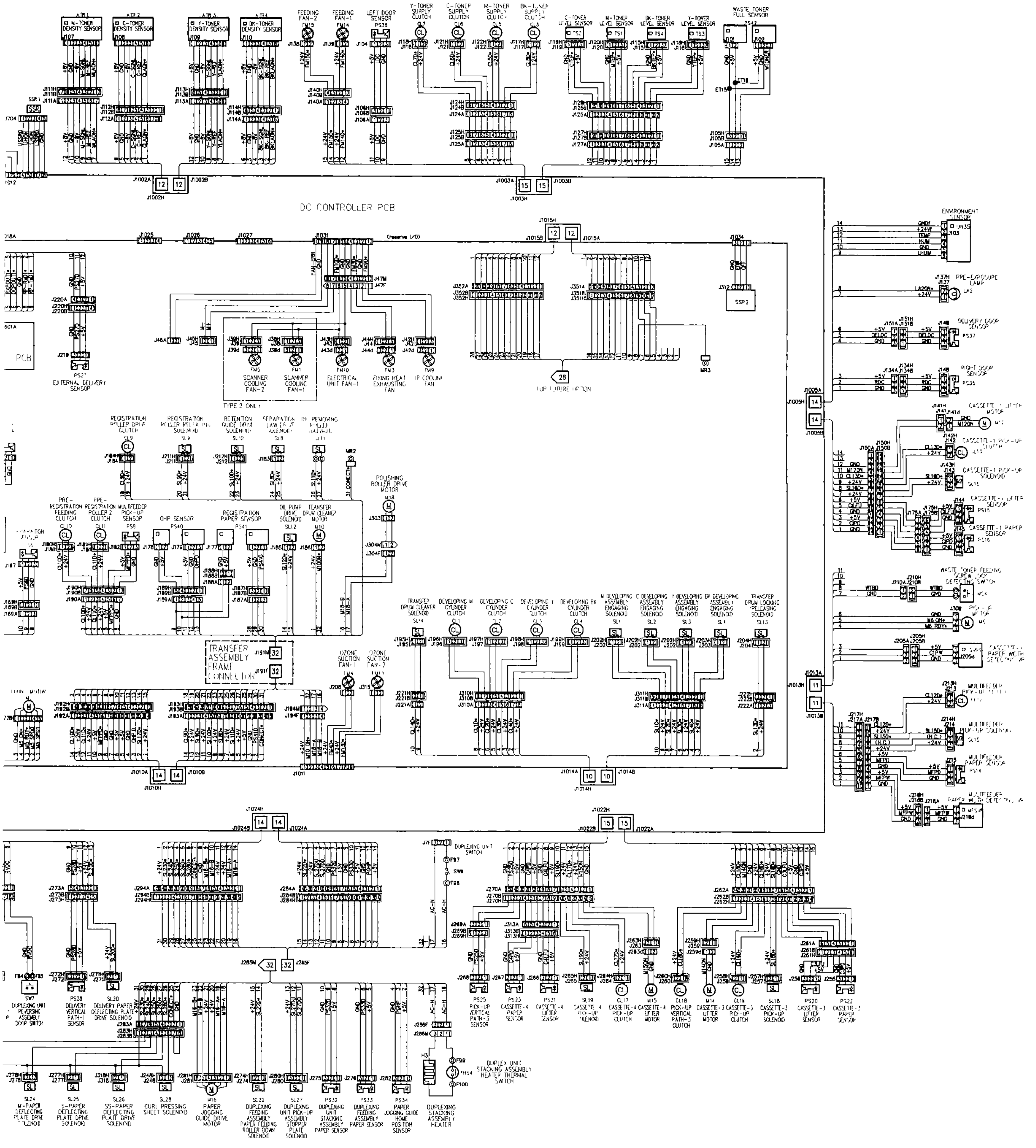
General circuit diagram (1/3)

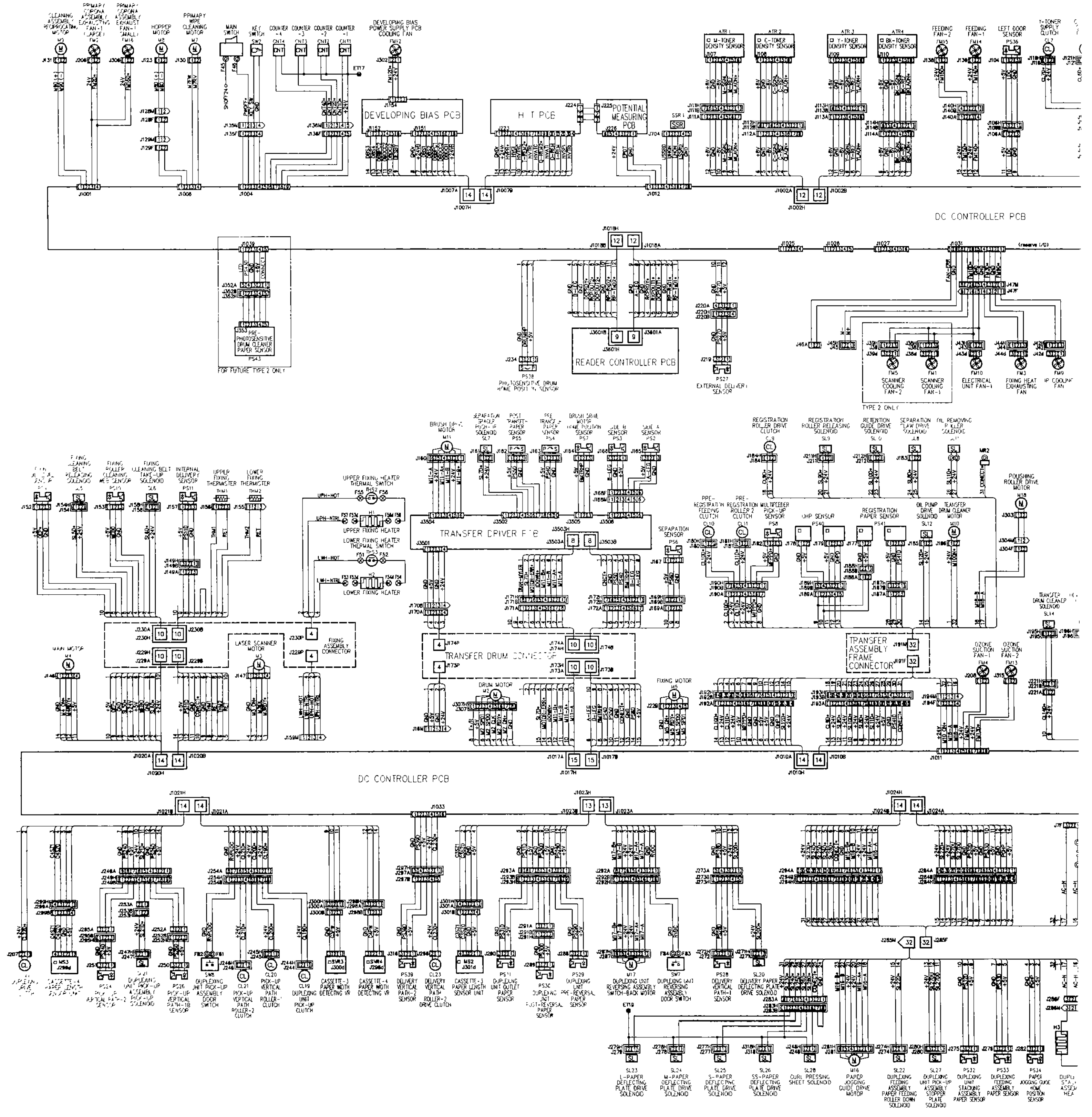

RL2
SSR 1
TO FIXING ASSEMBLY CONNECTOR
TO DOOR SWITCH
OPTIONS POWER SUPPLY PCB
LAMP REGULATOR PCB
ENERGY SAVING SWITCH
SSR2
CLC700
CLC800
SCANNING LAMP
TO MAIN POWER SUPPLY PCB
TO POWER CUT RELAY
LEFT DOOR SWITCH
DELIVERY DOOR SWITCH
LASER SCANER MOTOR PCB
DRUM MOTOR PCB
FIXING MOTOR PCB
MAIN MOTOR PCB
DRUM HEATER CONTROLLER PCB
DRUM HEATER (OPTION)
UPPER CASSETTE HEATER (CLC700)
LOWER CASSETTE HEATER (CLC800)
TO FIXING RELAY
TO TRANSFER DRUM
TO DC CONTROLLER PCB
PICK-UP MOTOR PCB
HVT
DEVELOPNG BIAS PCB
SCANNER HOME POSITION SENSOR
SCANNER COOLING FAN-4
SCANNER COOLING FAN-3
TYPE 1
SCANNER COOLING FAN-2
SCANNER MOTOR
EDITOR SOCKET
FOR FUTURE OPTION
PROJECTOR SOCKET
OPTIONS SOCKET
SCANNER MOTOR DRIVER PCB
SCANNER COOLING FAN-1
TO LAMP REGULATOR PCB
TO MAIN POWER SUPPLY PCB
READER CONTROLLER PCB
OPTIONS POWER SUPPLY PCB
CONTROL CARD V (OPTION)
CONTROL PANEL RELAY PCB
KEYPAD PCB
SUBKEY PCB
LCD DISPLAY/TOUCH PANEL PCB
PILOT LAMP PCB



POWER CUT RELAY
RL1
CB1
LF1
P1
(AC115V, 50/60Hz, TWN)
(AC115V, 50/60Hz, UL)
(AC230V, 50Hz, EUR)
(AC240V, 50Hz, GB)
(AC240V, 50Hz, CA)
MAIN SWITCH
SW1
TO DC CONTROLLER PCB
MAIN POWER SUPPLY PCB
CLC700
CLC800
ENERGY SAVING SWITCH
SSR2
OPTIONS POWER SUPPLY PCB
LAMP REGULATOR PCB
SCANNING LAMP
DRUM HEATER CONTROLLER PCB
DRUM HEATER (OPTION)
UPPER CASSETTE HEATER (CLC700)
LOWER CASSETTE HEATER (CLC800)
EXTERNAL DEVICE SOCKET
SK3
IMAGE PROCESSOR IF PCB (OPTION) (CLC700)
IMAGE PROCESSOR MAIN PCB
IMAGE PROCESSOR ED PCB
IMAGE PROCESSOR ESC PCB
TO MAIN POWER SUPPLY PCB
ANALOG PROCESSOR PCB
CCD/CCD DRIVER PCB
IMAGE PROCESSOR MOTHER PCB
LASER CONTROLLER PCB
DC CONTROLLER PCB
LASER DRIVER PCB
BD PCB
TO MAIN POWER SUPPLY PCB
EDITOR SOCKET
SK4
PROJECTOR SOCKET
SK2
TO LAMP REGULATOR PCB
SCANNER HOME POSITION SENSOR
SCANNER COOLING FAN-4
SCANNER MOTOR DRIVER PCB
READER CONT
CONTROL PANEL RELAY PCB
KEYPAD PCB
SUBKEY PCB
LCD
PILOT LAMP PCB

General circuit diagram (2/3)


DC CONTROLLER PCB
M-TONER DENSITY SENSOR
C-TONER DENSITY SENSOR
Y-TONER DENSITY SENSOR
BK-TONER DENSITY SENSOR
FEEDING FAN-2
FEEDING FAN-1
LEFT DOOR SENSOR
Y-TONER SUPPLY CLUTCH
C-TONER SUPPLY CLUTCH
M-TONER SUPPLY CLUTCH
BK-TONER SUPPLY CLUTCH
C-TONER LEVEL SENSOR
M-TONER LEVEL SENSOR
BK-TONER LEVEL SENSOR
Y-TONER LEVEL SENSOR
WASTE TONER FULL SENSOR
ENVIRONMENT SENSOR
PRE-EXPOSURE LAMP
DELIVERY DOOR SENSOR
RIGHT DOOR SENSOR
CASSETTE-1 LIFTER MOTOR
CASSETTE-1 PICK-UP CLUTCH
CASSETTE-1 PICK-UP SOLENOID
CASSETTE-1 LIFTER SENSOR
CASSETTE-1 PAPER SENSOR
WASTE TONER FEEDING SCREW LOCK DETECTING SWITCH
PICK-UP MOTOR
CASSETTE-1 PAPER WIDTH DETECTING VR
MULTIFEEDER PICK-UP CLUTCH
MULTIFEEDER PICK-UP SOLENOID
MULTIFEEDER PAPER SENSOR
MULTIFEEDER PAPER WIDTH DETECTING VR
EXTERNAL DELIVERY SENSOR
SCANNER COOLING FAN-2
SCANNER COOLING FAN-1
ELECTRICAL UNIT FAN-1
FIXING HEAT EXHAUSTING FAN
IP COOLING FAN
TYPE 2 ONLY
FOR FUTURE OPTION
REGISTRATION ROLLER DRIVE CLUTCH
REGISTRATION ROLLER RELEASING SOLENOID
RETENTION GUIDE DRIVE SOLENOID
SEPARATION CLAW DRIVE SOLENOID
OIL REMOVING ROLLER SOLENOID
POLISHING ROLLER DRIVE MOTOR
PRE-REGISTRATION FEEDING CLUTCH
PRE-REGISTRATION ROLLER 2 CLUTCH
MULTIFEEDER PICK-UP SENSOR
OHP SENSOR
REGISTRATION PAPER SENSOR
OIL PUMP DRIVE SOLENOID
TRANSFER DRUM CLEANER MOTOR
TRANSFER ASSEMBLY FRAME CONNECTOR
OZONE SUCTION FAN-1
OZONE SUCTION FAN-2
TRANSFER DRUM CLEANER SOLENOID
DEVELOPING M CYLINDER CLUTCH
DEVELOPING C CYLINDER CLUTCH
DEVELOPING Y CYLINDER CLUTCH
DEVELOPING BK CYLINDER CLUTCH
M DEVELOPING ASSEMBLY ENGAGING SOLENOID
C DEVELOPING ASSEMBLY ENGAGING SOLENOID
Y DEVELOPING ASSEMBLY ENGAGING SOLENOID
BK DEVELOPING ASSEMBLY ENGAGING SOLENOID
TRANSFER DRUM LOCKING/RELEASING SOLENOID
DUPLEXING UNIT SWITCH
DUPLEXING UNIT REVERSING ASSEMBLY DOOR SWITCH
DELIVERY VERTICAL PATH-1 SENSOR
DELIVERY PAPER DEFLECTING PLATE DRIVE SOLENOID
PICK-UP VERTICAL PATH-3 SENSOR
CASSETTE-4 PAPER SENSOR
CASSETTE-4 LIFTER SENSOR
CASSETTE-4 PICK-UP SOLENOID
CASSETTE-4 PICK-UP CLUTCH
CASSETTE-4 LIFTER MOTOR
PICK-UP VERTICAL PATH-3 CLUTCH
CASSETTE-3 LIFTER MOTOR
CASSETTE-3 PICK-UP CLUTCH
CASSETTE-3 PICK-UP SOLENOID
CASSETTE-3 LIFTER SENSOR
CASSETTE-3 PAPER SENSOR
DUPLEX UNIT STACKING ASSEMBLY HEATER THERMAL SWITCH
M-PAPER DEFLECTING PLATE DRIVE SOLENOID
S-PAPER DEFLECTING PLATE DRIVE SOLENOID
SS-PAPER DEFLECTING PLATE DRIVE SOLENOID
CURL PRESSING SHEET SOLENOID
PAPER JOGGING GUIDE DRIVE MOTOR
DUPLEXING FEEDING ASSEMBLY PAPER FOLDING ROLLER DOWN SOLENOID
DUPLEXING UNIT PICK-UP ASSEMBLY STOPPER PLATE SOLENOID
DUPLEXING UNIT STACKING ASSEMBLY PAPER SENSOR
DUPLEXING FEEDING ASSEMBLY PAPER SENSOR
PAPER JOGGING GUIDE HOME POSITION SENSOR
DUPLEXING STACKING ASSEMBLY HEATER


CLEANING ASSEMBLY RECIPROCATING MOTOR
M5
PRIMARY CORONA ASSEMBLY EXHAUSTING FAN-1 (LARGE)
FM2
PRIMARY CORONA ASSEMBLY EXHAUST FAN-1 (SMALL)
FM16
HOPPER MOTOR
M8
PRIMARY WIRE CLEANING MOTOR
M2
MAIN SWITCH
KEY SWITCH
SW2
COUNTER -4
CNT4
COUNTER -3
CNT3
COUNTER -2
CNT2
COUNTER -1
CNT1
DEVELOPING BIAS POWER SUPPLY PCB COOLING FAN
FM12
ET17
DEVELOPING BIAS PCB
H.T PCB
POTENTIAL MEASURING PCB
SSR
ATR 1
M-TONER DENSITY SENSOR
ATR 2
C-TONER DENSITY SENSOR
ATR 3
Y-TONER DENSITY SENSOR
ATR4
BK-TONER DENSITY SENSOR
FEEDING FAN-2
FM15
FEEDING FAN-1
FM14
LEFT DOOR SENSOR
PS36
Y-TONER SUPPLY CLUTCH
CL7
J1001
J1006
J1004
J1007A
J1007B
J1007H
J1012
J1002A
J1002B
J1002H
DC CONTROLLER PCB
J1018H
J1018B
J1018A
J1025
J1026
J1027
J1031
(reserve I/O)
J1039
PRE-PHOTOSENSITIVE DRUM CLEANER PAPER SENSOR
PS43
FOR FUTURE TYPE 2 ONLY
J3601B
J3601A
J3601H
READER CONTROLLER PCB
J234
PS38
PHOTOSENSITIVE DRUM HOME POSITION SENSOR
J219
PS27
EXTERNAL DELIVERY SENSOR
FM5
SCANNER COOLING FAN-2
FM1
SCANNER COOLING FAN-1
FM10
ELECTRICAL UNIT FAN-1
FM3
FIXING HEAT EXHAUSTING FAN
FM9
IP COOLING FAN
TYPE 2 ONLY
FIXING CLEANING BELT RELEASING SOLENOID
SL5
FIXING ROLLER CLEANING WEB SENSOR
PS10
FIXING CLEANING BELT TAKE-UP SOLENOID
SL6
INTERNAL DELIVERY SENSOR
PS11
UPPER FIXING THERMISTER
THM1
LOWER FIXING THERMISTER
THM2
UPPER FIXING HEATER THERMAL SWITCH
THS1
H1
UPPER FIXING HEATER
LOWER FIXING HEATER THERMAL SWITCH
THS2
H2
LOWER FIXING HEATER
UPH-HOT
UPH-NTRL
LWH-HOT
LWH-NTRL
BRUSH DRIVE MOTOR
M11
SEPARATION SPACER PICK-UP SOLENOID
SL7
POST TRANSFER PAPER SENSOR
PS5
PRE TRANSFER PAPER SENSOR
PS4
BRUSH DRIVE MOTOR HOME POSITION SENSOR
PS7
SIDE B SENSOR
PS3
SIDE A SENSOR
PS2
TRANSFER DRIVER PCB
SEPARATION SENSOR
PS6
REGISTRATION ROLLER DRIVE CLUTCH
CL9
REGISTRATION ROLLER RELEASING SOLENOID
SL9
RETENTION GUIDE DRIVE SOLENOID
SL10
SEPARATION CLAW DRIVE SOLENOID
SL8
OIL REMOVING ROLLER SOLENOID
SL11
MR2
POLISHING ROLLER DRIVE MOTOR
M18
PRE-REGISTRATION FEEDING CLUTCH
CL10
PRE-REGISTRATION ROLLER 2 CLUTCH
CL11
MULTIFEEDER PICK-UP SENSOR
PS8
OHP SENSOR
PS40
REGISTRATION PAPER SENSOR
PS41
OIL PUMP DRIVE SOLENOID
SL12
TRANSFER DRUM CLEANER MOTOR
M10
TRANSFER DRUM CLEANER SOLENOID
SL1
MAIN MOTOR
M1
LASER SCANNER MOTOR
M3
FIXING ASSEMBLY CONNECTOR
TRANSFER DRUM CONNECTOR
DRUM MOTOR
M3
FIXING MOTOR
M5
TRANSFER ASSEMBLY FRAME CONNECTOR
OZONE SUCTION FAN-1
FM4
OZONE SUCTION FAN-2
FM13
J1020A
J1020B
J1020H
J1017A
J1017B
J1017H
J1010A
J1010B
J1010H
J1011
DC CONTROLLER PCB
J1021H
J1021B
J1021A
J1033
J1023H
J1023B
J1023A
J1024H
J1024B
J1024A
DUPLEXING UNIT DRIVE CLUTCH
CASSETTE-4 PAPER LENGTH SENSOR UNIT
MS3
PS24
PICK-UP VERTICAL PATH-2 SENSOR
SL21
DUPLEXING UNIT PICK-UP ASSEMBLY PICK-UP SOLENOID
PS26
PICK-UP VERTICAL PATH-1B SENSOR
SW8
DUPLEXING UNIT PICK-UP ASSEMBLY DOOR SWITCH
CL21
PICK-UP VERTICAL PATH ROLLER-2 CLUTCH
CL20
PICK-UP VERTICAL PATH ROLLER-1 CLUTCH
CL19
DUPLEXING UNIT PICK-UP CLUTCH
SVR3
CASSETTE-3 PAPER WIDTH DETECTING VR
SVR4
CASSETTE-4 PAPER WIDTH DETECTING VR
PS39
DELIVERY VERTICAL PATH-2 SENSOR
CL23
DELIVERY VERTICAL PATH ROLLER-2 DRIVE CLUTCH
MS2
CASSETTE-3 PAPER LENGTH SENSOR UNIT
PS31
DUPLEXING UNIT OUTLET PAPER SENSOR
PS30
DUPLEXING UNIT POST-REVERSAL PAPER SENSOR
PS29
DUPLEXING UNIT PRE-REVERSAL PAPER SENSOR
M17
DUPLEXING UNIT REVERSING ASSEMBLY SWITCH-BACK MOTOR
SW7
DUPLEXING UNIT REVERSING ASSEMBLY DOOR SWITCH
PS28
DELIVERY VERTICAL PATH-1 SENSOR
SL20
DELIVERY PAPER DEFLECTING PLATE DRIVE SOLENOID
ET19
SL23
L-PAPER DEFLECTING PLATE DRIVE SOLENOID
SL24
M-PAPER DEFLECTING PLATE DRIVE SOLENOID
SL25
S-PAPER DEFLECTING PLATE DRIVE SOLENOID
SL26
SS-PAPER DEFLECTING PLATE DRIVE SOLENOID
SL28
CURL PRESSING SHEET SOLENOID
M16
PAPER JOGGING GUIDE DRIVE MOTOR
SL22
DUPLEXING FEEDING ASSEMBLY PAPER FEEDING ROLLER DOWN SOLENOID
SL27
DUPLEXING UNIT PICK-UP ASSEMBLY STOPPER PLATE SOLENOID
PS32
DUPLEXING UNIT STACKING ASSEMBLY PAPER SENSOR
PS33
DUPLEXING FEEDING ASSEMBLY PAPER SENSOR
PS34
PAPER JOGGING GUIDE HOME POSITION SENSOR
H3

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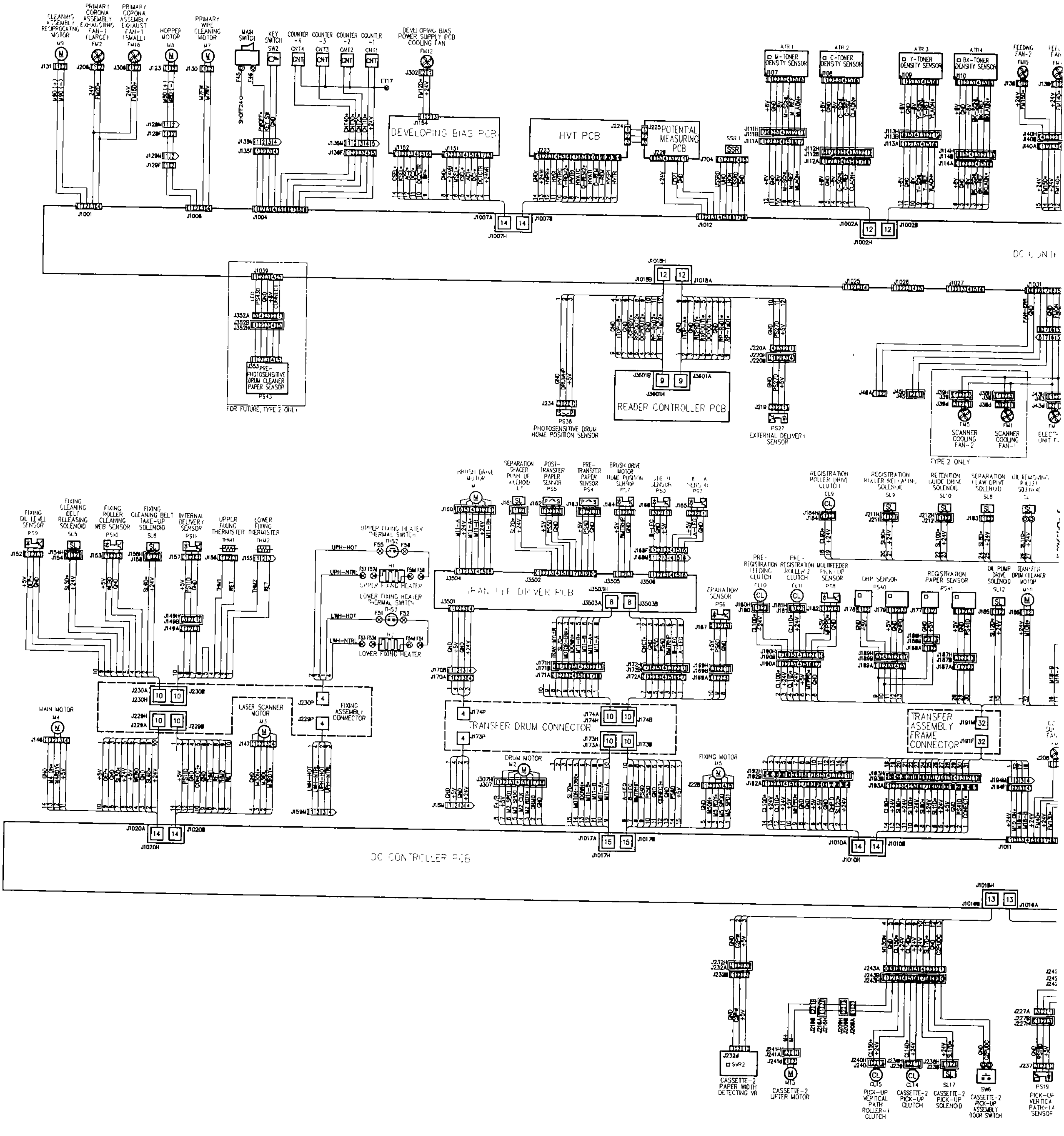
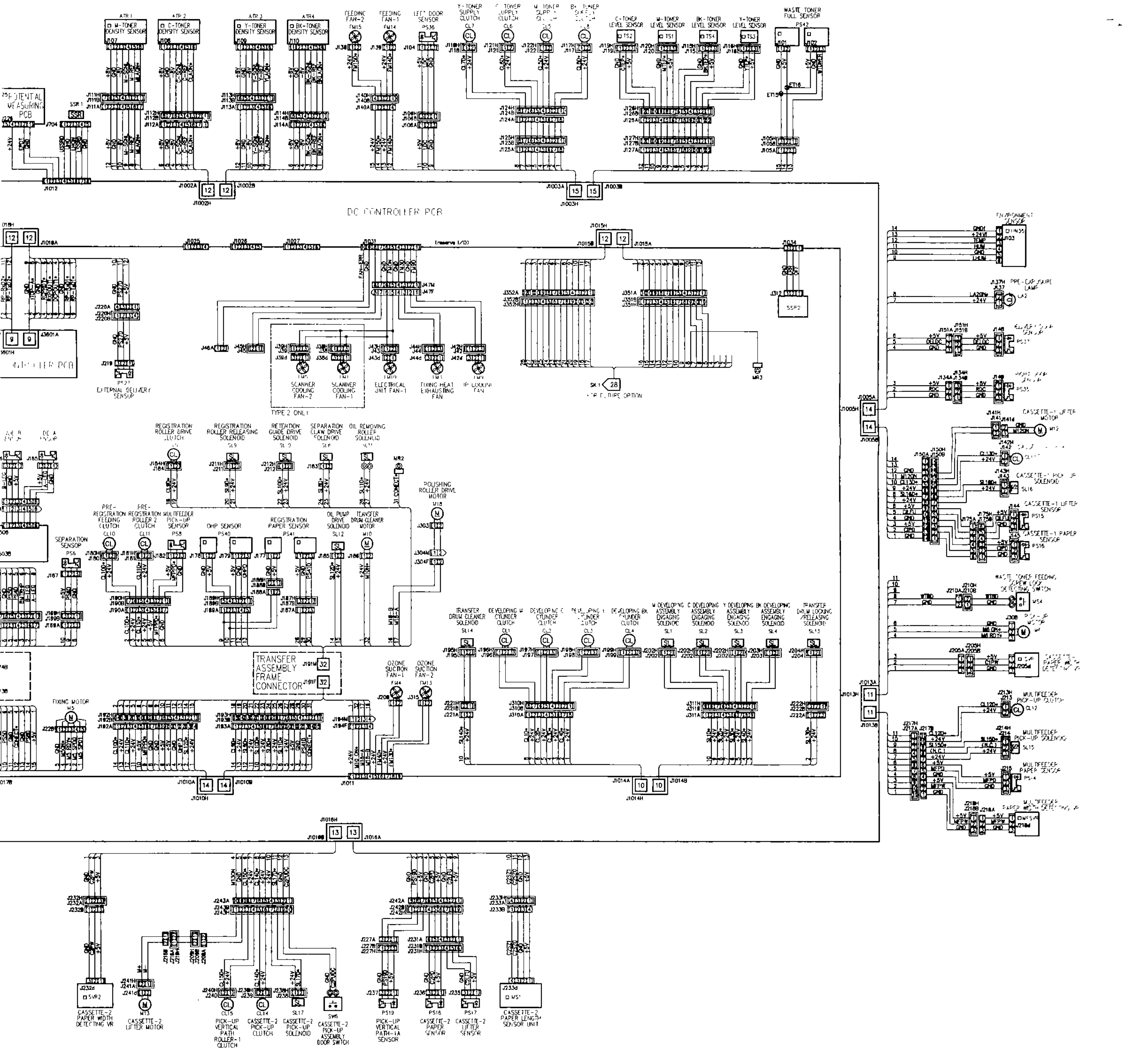
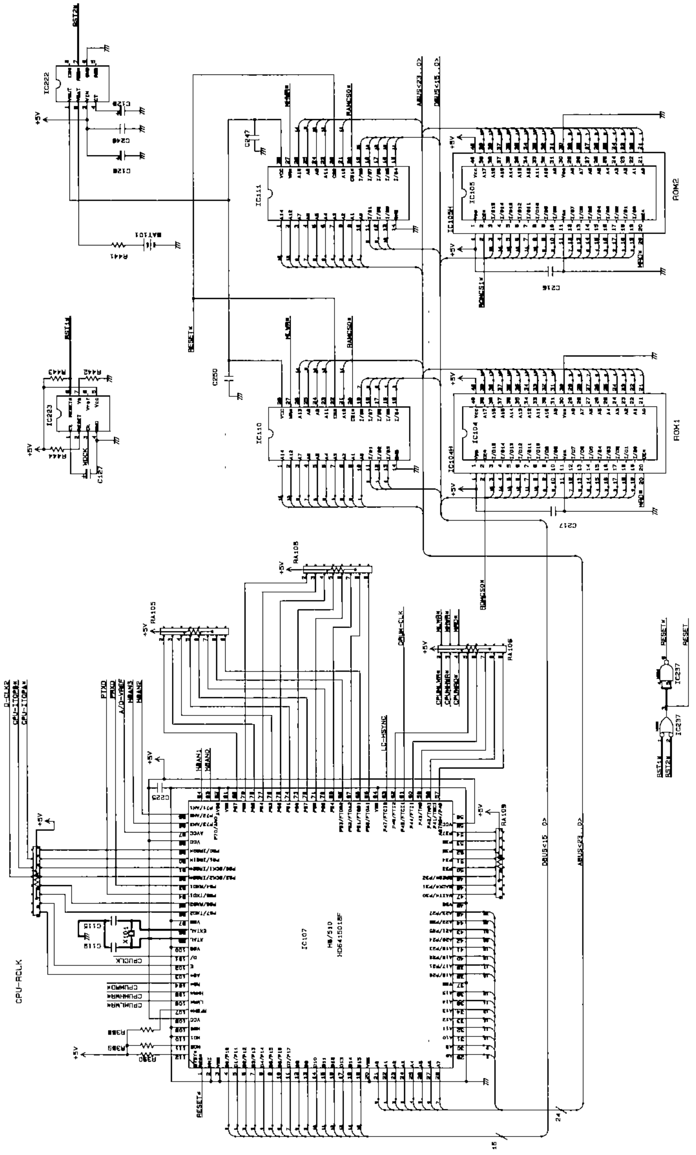
General circuit diagram (3/3)


CLEANING ASSEMBLY RECIPROCATING MOTOR M9
PRIMARY CORONA ASSEMBLY EXHAUSTING FAN-1 (LARGE) FM2
PRIMARY CORONA ASSEMBLY EXHAUST FAN-1 (SMALL) FM16
HOPPER MOTOR M8
PRIMARY WIRE CLEANING MOTOR M7
MAIN SWITCH
KEY SWITCH SW2
COUNTER -4 CNT4
COUNTER -3 CNT3
COUNTER -2 CNT2
COUNTER -1 CNT1
DEVELOPING BIAS POWER SUPPLY PCB COOLING FAN FM12
DEVELOPING BIAS PCB
HVT PCB
POTENTIAL MEASURING PCB
SSR1
M-TONER DENSITY SENSOR
C-TONER DENSITY SENSOR
Y-TONER DENSITY SENSOR
BK-TONER DENSITY SENSOR
FEEDING FAN-2
DC CONTROLLER PCB
PRE-PHOTOSENSITIVE DRUM CLEANER PAPER SENSOR PS43
FOR FUTURE, TYPE 2 ONLY
PHOTOSENSITIVE DRUM HOME POSITION SENSOR PS38
READER CONTROLLER PCB
EXTERNAL DELIVERY SENSOR PS27
SCANNER COOLING FAN-2 FM5
SCANNER COOLING FAN-1 FM1
TYPE 2 ONLY
FIXING OIL LEVEL SENSOR PS9
FIXING CLEANING BELT RELEASING SOLENOID SL5
FIXING ROLLER CLEANING WEB SENSOR PS10
FIXING CLEANING BELT TAKE-UP SOLENOID SL6
INTERNAL DELIVERY SENSOR PS11
UPPER FIXING THERMISTER THM1
LOWER FIXING THERMISTER THM2
UPPER FIXING HEATER THERMAL SWITCH TH52
UPPER FIXING HEATER H1
LOWER FIXING HEATER THERMAL SWITCH TH53
LOWER FIXING HEATER H2
FIXING ASSEMBLY CONNECTOR
MAIN MOTOR M4
LASER SCANNER MOTOR M3
BRUSH DRIVE MOTOR
SEPARATION SPACER PUSH UP SOLENOID
POST-TRANSFER PAPER SENSOR PS5
PRE-TRANSFER PAPER SENSOR PS4
BRUSH DRIVE MOTOR HOME POSITION SENSOR PS7
TRANSFER DRIVER PCB
SEPARATION SENSOR PS6
TRANSFER DRUM CONNECTOR
DRUM MOTOR M2
FIXING MOTOR M5
REGISTRATION ROLLER DRIVE CLUTCH CL9
REGISTRATION ROLLER RELEASING SOLENOID SL9
RETENTION GUIDE DRIVE SOLENOID SL10
SEPARATION CLAW DRIVE SOLENOID SL8
PRE-REGISTRATION FEEDING CLUTCH CL10
PRE-REGISTRATION ROLLER-2 CLUTCH CL11
MULTIFEEDER PICK-UP SENSOR PS8
OHP SENSOR PS40
REGISTRATION PAPER SENSOR PS41
OIL PUMP DRIVE SOLENOID SL12
TRANSFER DRUM CLEANER MOTOR M10
TRANSFER ASSEMBLY FRAME CONNECTOR
DC CONTROLLER PCB
CASSETTE-2 PAPER WIDTH DETECTING VR SVR2
CASSETTE-2 LIFTER MOTOR M13
PICK-UP VERTICAL PATH ROLLER-1 CLUTCH CL15
CASSETTE-2 PICK-UP CLUTCH CL14
CASSETTE-2 PICK-UP SOLENOID SL17
CASSETTE-2 PICK-UP ASSEMBLY DOOR SWITCH SW6
PICK-UP VERTICAL PATH-1 SENSOR PS19


DC CONTROLLER PCB
POTENTIAL MEASURING PCB
SSR1
ATR1
M-TONER DENSITY SENSOR
ATR2
C-TONER DENSITY SENSOR
ATR3
Y-TONER DENSITY SENSOR
ATR4
BK-TONER DENSITY SENSOR
FEEDING FAN-2
FEEDING FAN-1
LEFT DOOR SENSOR
Y-TONER SUPPLY CLUTCH
C-TONER SUPPLY CLUTCH
M-TONER SUPPLY CLUTCH
BK-TONER SUPPLY CLUTCH
C-TONER LEVEL SENSOR
M-TONER LEVEL SENSOR
BK-TONER LEVEL SENSOR
Y-TONER LEVEL SENSOR
WASTE TONER FULL SENSOR
ENVIRONMENT SENSOR
PRE-EXPOSURE LAMP
SSP2
SCANNER COOLING FAN-2
SCANNER COOLING FAN-1
ELECTRICAL UNIT FAN-1
FIXING HEAT EXHAUSTING FAN
IP COOLING FAN
TYPE 2 ONLY
EXTERNAL DELIVERY SENSOR
REGISTRATION ROLLER DRIVE CLUTCH
REGISTRATION ROLLER RELEASING SOLENOID
RETENTION GUIDE DRIVE SOLENOID
SEPARATION CLAW DRIVE SOLENOID
OIL REMOVING ROLLER SOLENOID
POLISHING ROLLER DRIVE MOTOR
PRE-REGISTRATION FEEDING CLUTCH
PRE-REGISTRATION ROLLER 2 CLUTCH
MULTIFEEDER PICK-UP SENSOR
OHP SENSOR
REGISTRATION PAPER SENSOR
OIL PUMP DRIVE SOLENOID
TRANSFER DRUM CLEANER MOTOR
SEPARATION SENSOR
TRANSFER ASSEMBLY FRAME CONNECTOR
FIXING MOTOR
OZONE SUCTION FAN-1
OZONE SUCTION FAN-2
TRANSFER DRUM CLEANER SOLENOID
DEVELOPING M CYLINDER CLUTCH
DEVELOPING C CYLINDER CLUTCH
DEVELOPING Y CYLINDER CLUTCH
DEVELOPING BK CYLINDER CLUTCH
M DEVELOPING ASSEMBLY ENGAGING SOLENOID
C DEVELOPING ASSEMBLY ENGAGING SOLENOID
Y DEVELOPING ASSEMBLY ENGAGING SOLENOID
BK DEVELOPING ASSEMBLY ENGAGING SOLENOID
TRANSFER DRUM LOCKING /RELEASING SOLENOID
CASSETTE-1 LIFTER MOTOR
CASSETTE-1 PICK-UP SOLENOID
CASSETTE-1 LIFTER SENSOR
CASSETTE-1 PAPER SENSOR
WASTE TONER FEEDING SCREW LOCK DETECTING SWITCH
MULTIFEEDER PICK-UP CLUTCH
MULTIFEEDER PICK-UP SOLENOID
MULTIFEEDER PAPER SENSOR
MULTIFEEDER PAPER WIDTH DETECTING VR
CASSETTE-2 PAPER WIDTH DETECTING VR
CASSETTE-2 LIFTER MOTOR
PICK-UP VERTICAL PATH ROLLER-1 CLUTCH
CASSETTE-2 PICK-UP CLUTCH
CASSETTE-2 PICK-UP SOLENOID
CASSETTE-2 PICK-UP ASSEMBLY DOOR SWITCH
PICK-UP VERTICAL PATH-1A SENSOR
CASSETTE-2 PAPER SENSOR
CASSETTE-2 LIFTER SENSOR
CASSETTE-2 PAPER LENGTH SENSOR UNIT
SK1
FOR CLUTIPS OPTION

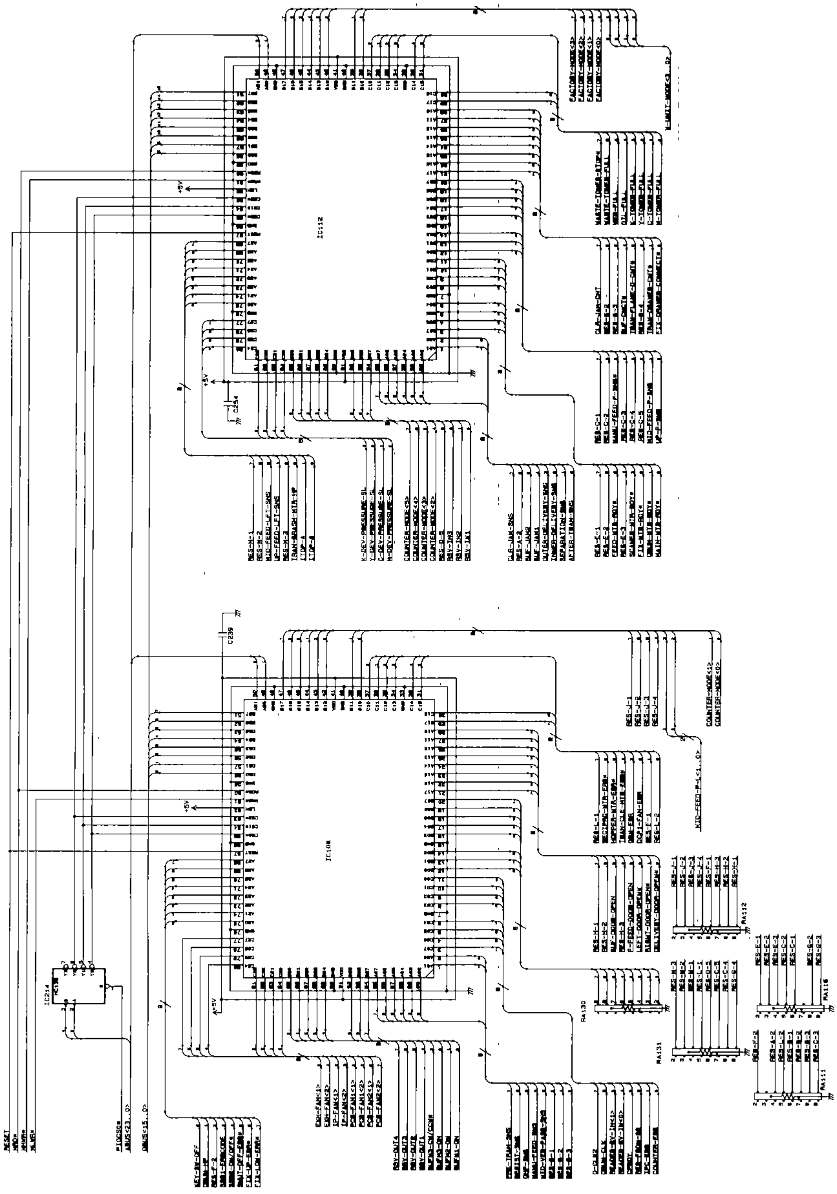
D. DC CONTROLLER CIRCUIT DIAGRAM

DC controller circuit diagram (CLC700) (1/21)

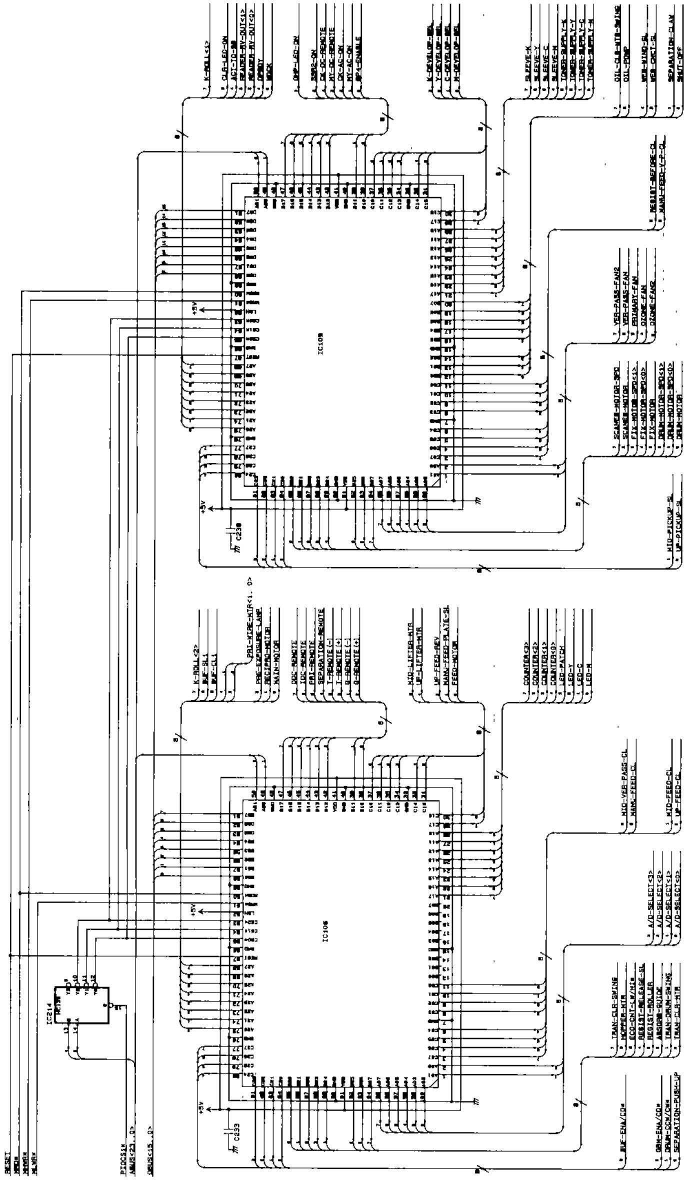


RST2*
IC222
RST1*
IC223
R441
BAT101
R442
R443
R444
MDCK
C127
C128
C246
C247
C250
IC111
IC110
ABUS<23..0>
DBUS<15..0>
RAMCS0*
RESET*
IC105H
IC105
ROM2
IC104H
IC104
ROM1
ROMCS1*
ROMCS0*
C216
C217
RA108
RA105
RA106
D-CLK2
CPU-ITOP0*
CPU-ITOP1*
PTXD
PRXD
A/D-VREF
MBAN3
MBAN2
MBAN1
MBAN0
C225
LC-HSYNC
DRUM-CLK
CPUMLWR*
CPUMHWR*
CPUMRD*
CPUCLK
CPUMRD*
CPUHWR*
CPULWR*
X101
C115
C116
R388
R389
R390
CPU-RCLK
IC107
H8/510
HD6415108F
RA109
IC237
RESET
RST1*
RST2*
+5V
24
15

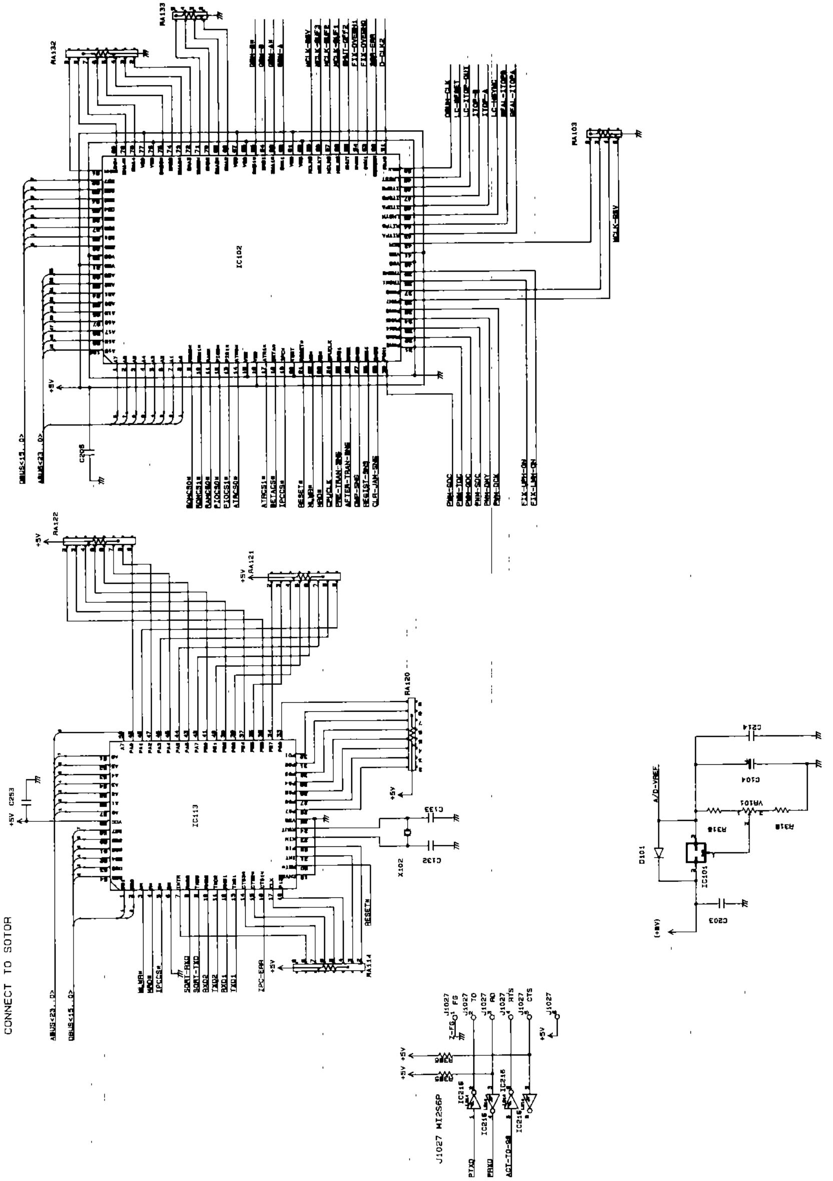
DC controller circuit diagram (CLC700) (2/21)


IC112
IC108
IC214
C254
C239
RA130
RA131
RA112
RA116
RA111
+5V
RESET
ABUS<23..0>
DBUS<15..0>
COUNTER-MODE<1>
COUNTER-MODE<0>
MID-FEED-P-L<1..0>

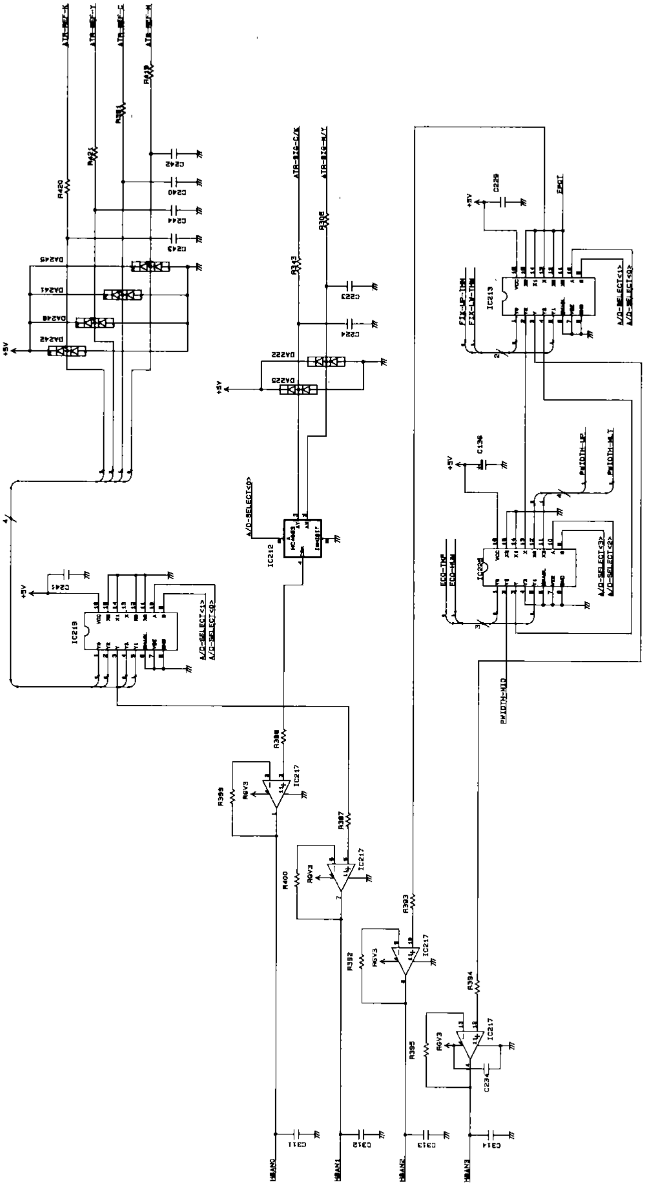
DC controller circuit diagram (CLC700) (3/21)


K-ROLL<1>
CLN-LED-ON
ACT-TD-ON
READER-RY-OUT<1>
READER-RY-OUT<0>
DRDY
MDCK
ONP-LED-ON
SSR2-ON
CK-DC-REMOTE
HY-DC-REMOTE
CK-AC-ON
HY-AC-ON
SP4-ENABLE
K-DEVELOP-SEL
Y-DEVELOP-SEL
C-DEVELOP-SEL
M-DEVELOP-SEL
SLEEVE-K
SLEEVE-Y
SLEEVE-C
SLEEVE-M
TONER-SUPPLY-K
TONER-SUPPLY-Y
TONER-SUPPLY-C
TONER-SUPPLY-M
OIL-CLN-MTR-SWING
OIL-PUMP
WEB-WIND-SL
WEB-CNCT-SL
SEPARATION-CLAW
SHUT-OFF
REGIST-BEFORE-CL
MANU-FEED-Y-P-CL
VER-PASS-FAN2
VER-PASS-FAN
PRIMARY-FAN
OZONE-FAN
OZONE-FAN2
SCANER-MOTOR-SPD
SCANER-MOTOR
FIX-MOTOR-SPD<1>
FIX-MOTOR-SPD<0>
FIX-MOTOR
DRUM-MOTOR-SPD<1>
DRUM-MOTOR-SPD<0>
DRUM-MOTOR
MID-PICKUP-SL
UP-PICKUP-SL
IC109
+5V
C238
K-ROLL<2>
BUF-SL1
BUF-CL1
PRI-WIRE-MTR<1. 0>
PRE-EXPOSURE-LAMP
RECIPRO-MOTOR
MAIN-MOTOR
DDC-REMOTE
IDC-REMOTE
PRI-REMOTE
SEPARATION-REMOTE
T-REMOTE(-)
T-REMOTE(+)
D-REMOTE(-)
D-REMOTE(+)
MID-LIFTER-MTR
UP-LIFTER-MTR
UP-FEED-REV
MANU-FEED-PLATE-SL
FEED-MOTOR
COUNTER<3>
COUNTER<2>
COUNTER<1>
COUNTER<0>
LED-PATCH
LED-Y
LED-C
LED-M
MID-VER-PASS-CL
MANU-FEED-CL
MID-FEED-CL
UP-FEED-CL
A/D-SELECT<3>
A/D-SELECT<2>
A/D-SELECT<1>
A/D-SELECT<0>
TRAN-CLN-SWING
HOPPER-MTR
ECO-CNT-L/H
REGIST-RELEASE-SL
REGIST-ROLLER
ABSORB-GUIDE
TRAN-DRUM-SWING
TRAN-CLN-MTR
BUF-ENA/CD*
DRM-ENA/CD*
DRUM-CCW/CW*
SEPARATION-PUSH-UP
IC106
C233
IC214
HC138
RESET
WRD*
WRH*
WLWR*
PIOCS1*
ABUS<23..0>
DBUS<15..0>

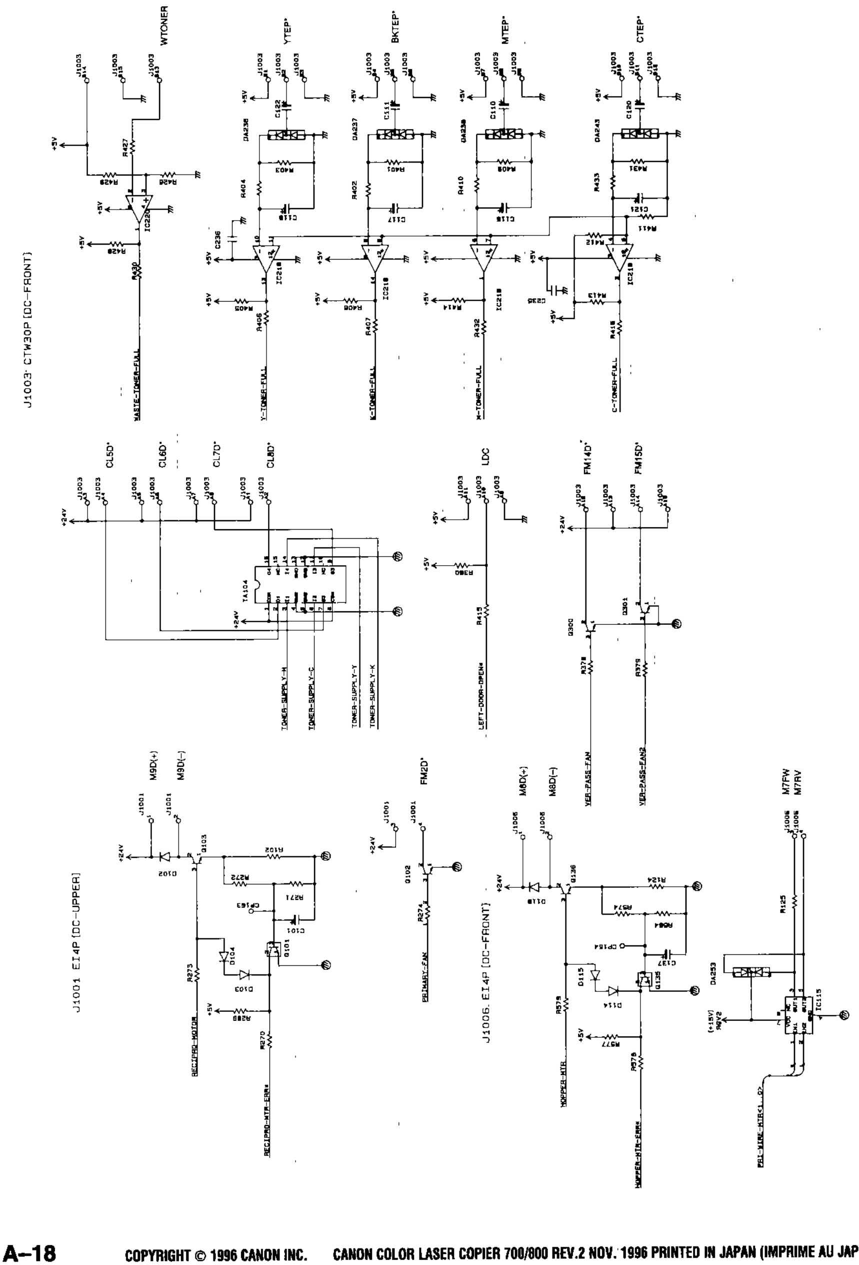
DC controller circuit diagram (CLC700) (4/21)


RA132
RA133
RA103
IC102
WCLK-BSY
DRUM-CLK
ITOP-B
ITOP-A
LC-HSYNC
REAL-ITOPB
REAL-ITOPA
D-CLK2
DBUS<15..0>
ABUS<23..0>
+5V
C208
ROMCS0*
ROMCS1*
RAMCS0*
PIOCS0*
PIOCS1*
ATRCS0*
ATRCS1*
BETACS*
IPCCS*
RESET*
CPUCLK
PRE-TRAN-SNS
AFTER-TRAN-SNS
REGIST-SNS
CLR-JAM-SNS
PWM-DCK
FIX-UPH-ON
FIX-LWH-ON
RA122
RA121
RA120
IC113
C253
C133
C132
X102
IPCCS*
SORT-RXD
SORT-TXD
RXD2
TXD2
RXD1
TXD1
IPC-ERR
RESET*
RA114
CONNECT TO SOTOR
ABUS<23..0>
DBUS<15..0>
J1027
FG
TD
RD
RTS
CTS
J1027 MI2S6P
IC216
PTXD
PRXD
ACT-TO-SO
C214
C104
A/D-VREF
VR101
R318
R316
D101
IC101
C203
(+8V)

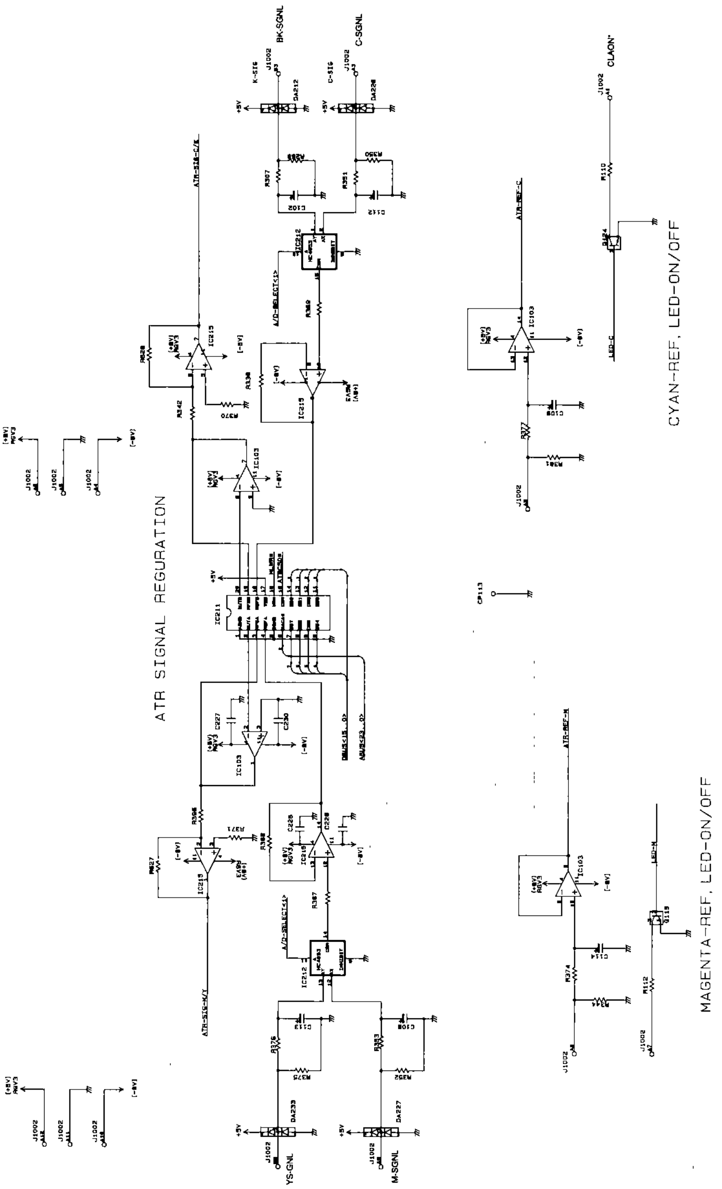
DC controller circuit diagram (CLC700) (5/21)


ATR-REF-K
ATR-REF-Y
ATR-REF-C
ATR-REF-M
R420
C242
C240
C244
C243
DA245
DA241
DA240
DA242
+5V
ATR-BIG-C/K
ATR-BIG-M/Y
R343
C223
C224
DA222
DA223
A/D-SELECT<0>
IC212
IC219
C241
A/D-SELECT<1>
A/D-SELECT<0>
R388
R399
RGV3
IC217
R387
R400
R393
R392
R394
R395
C234
C311
C312
C313
C314
HBAN0
HBAN1
HBAN2
HBAN3
C229
EPOT
FIX-UP-THM
FIX-LW-THM
IC213
C136
PWIDTH-UP
ECO-TMP
ECO-HUM
A/D-SELECT<3>
A/D-SELECT<2>
PWIDTH-MID

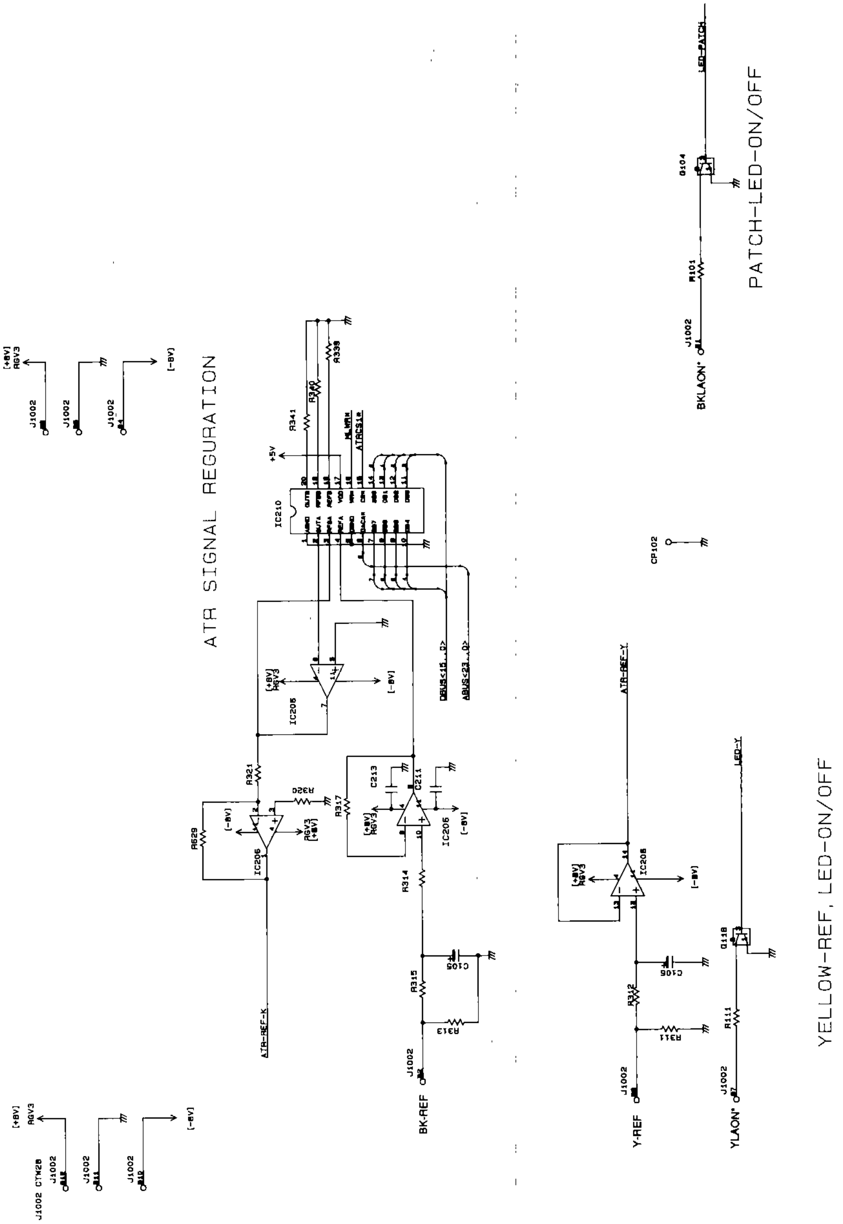
DC controller circuit diagram (CLC700) (6/21)


J1003: CTW30P [DC-FRONT]
WTONER
YTEP*
BKTEP*
MTEP*
CTEP*
WASTE-TONER-FULL
Y-TONER-FULL
K-TONER-FULL
M-TONER-FULL
C-TONER-FULL
IC218
IC220
CL5D*
CL6D*
CL7D*
CL8D*
TA104
TONER-SUPPLY-M
TONER-SUPPLY-C
TONER-SUPPLY-Y
TONER-SUPPLY-K
LDC
LEFT-DOOR-OPEN*
FM14D*
FM15D*
Q300
Q301
VER-PASS-FAN
VER-PASS-FAN2
J1001 EI4P [DC-UPPER]
M9D(+)
M9D(-)
RECIPRO-MOTOR
RECIPRO-MTR-ERR*
FM2D*
PRIMARY-FAN
J1006 EI4P [DC-FRONT]
M8D(+)
M8D(-)
HOPPER-MTR
HOPPER-MTR-ERR*
M7FW
M7RV
DA253
IC115
+24V
+5V

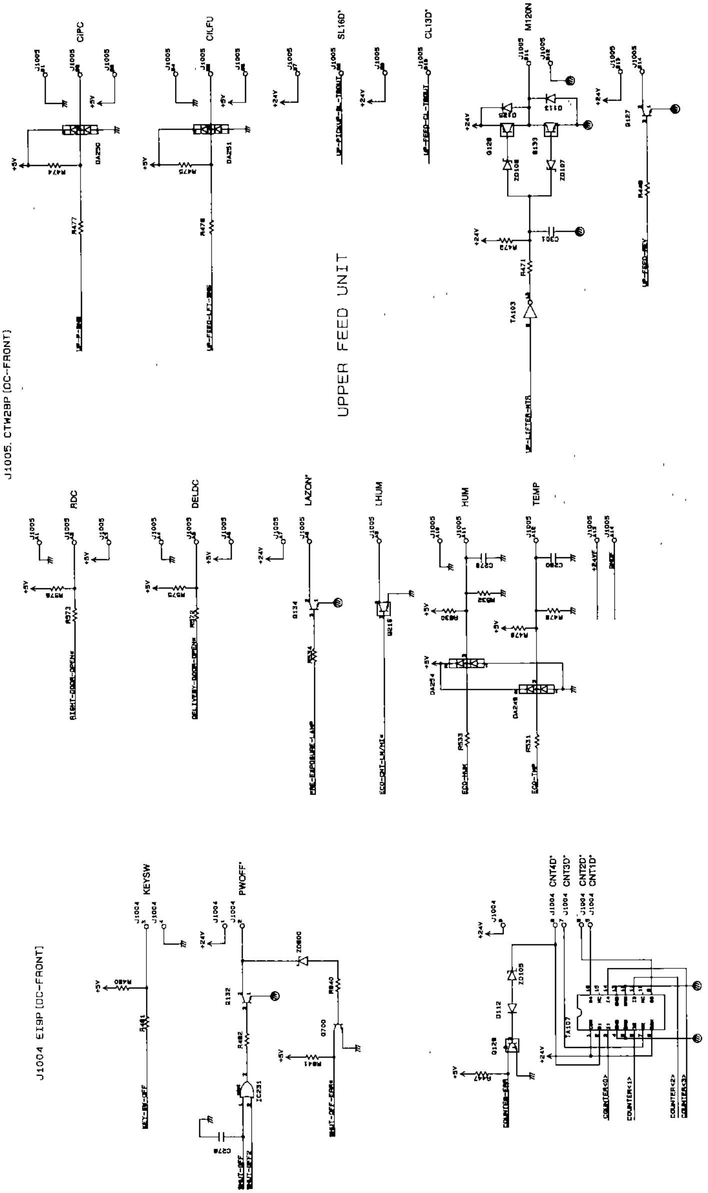
DC controller circuit diagram (CLC700) (7/21)


BK-SGNL
C-SGNL
CLAON*
K-SIG
C-SIG
J1002
DA212
DA228
+5V
R307
R351
C102
C112
IC212
A/D-SELECT<1>
ATR-SIG-C/K
IC215
R342
R370
IC213
IC103
ATR-REF-C
C108
R377
R341
R110
Q124
LED-C
CYAN-REF, LED-ON/OFF
ATR SIGNAL REGURATION
IC211
CP113
C227
C230
DBUS<15..0>
ABUS<23..0>
R366
R371
R327
C225
C228
R367
ATR-SIG-M/Y
C113
C108
R376
R375
R353
R352
DA233
DA227
YS-GNL
M-SGNL
ATR-REF-M
C114
R374
R344
R112
Q115
LED-M
MAGENTA-REF, LED-ON/OFF
(+8V)
(-8V)

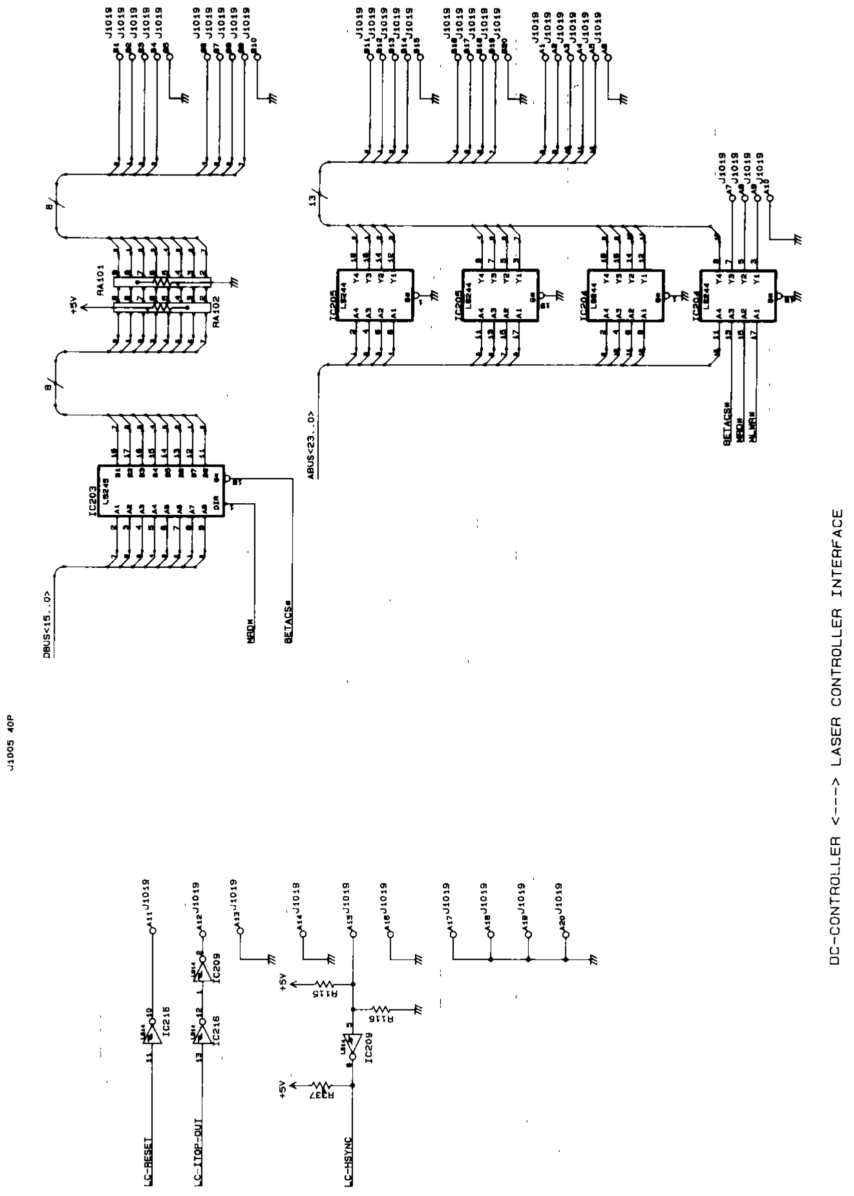
DC controller circuit diagram (CLC700) (8/21)


ATR SIGNAL REGURATION
PATCH-LED-ON/OFF
YELLOW-REF, LED-ON/OFF
LED-PATCH
Q104
R101
J1002
BKLAON*
CP102
IC210
+5V
R341
R340
R339
ML.WRH
ATRCS1*
DBUS<15..0>
ABUS<23..0>
IC205
[+8V]
RGV3
[-8V]
R321
R320
R629
IC206
ATR-REF-K
R317
C213
C211
R314
C105
R315
R313
BK-REF
ATR-REF-Y
IC208
C106
R312
R311
Y-REF
LED-Y
Q118
R111
YLAON*
J1002 CTK28

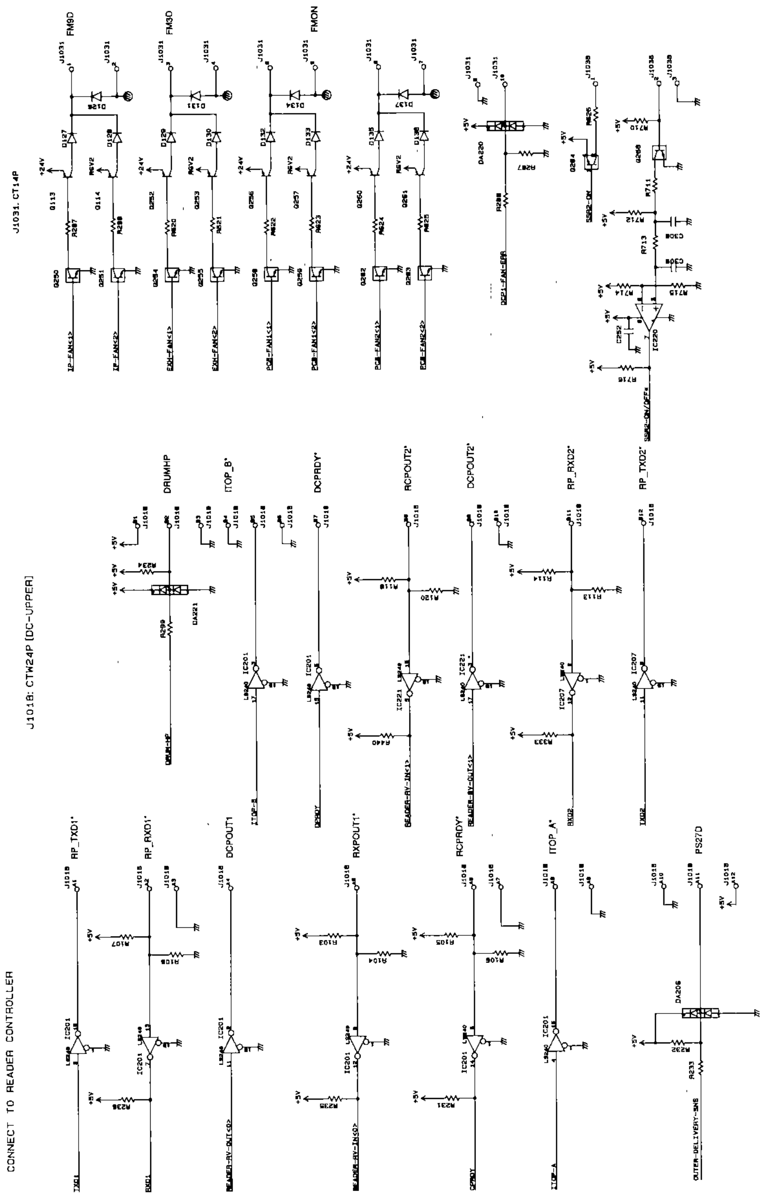
DC controller circuit diagram (CLC700) (9/21)


J1005. CTW28P [DC-FRONT]
CIPC
CILFU
SL16D*
CL13D*
M120N
UPPER FEED UNIT
RDC
DELDC
LAZON*
LHUM
HUM
TEMP
J1004 EI9P [DC-FRONT]
KEYSW
PWOFF*
CNT4D*
CNT3D*
CNT2D*
CNT1D*

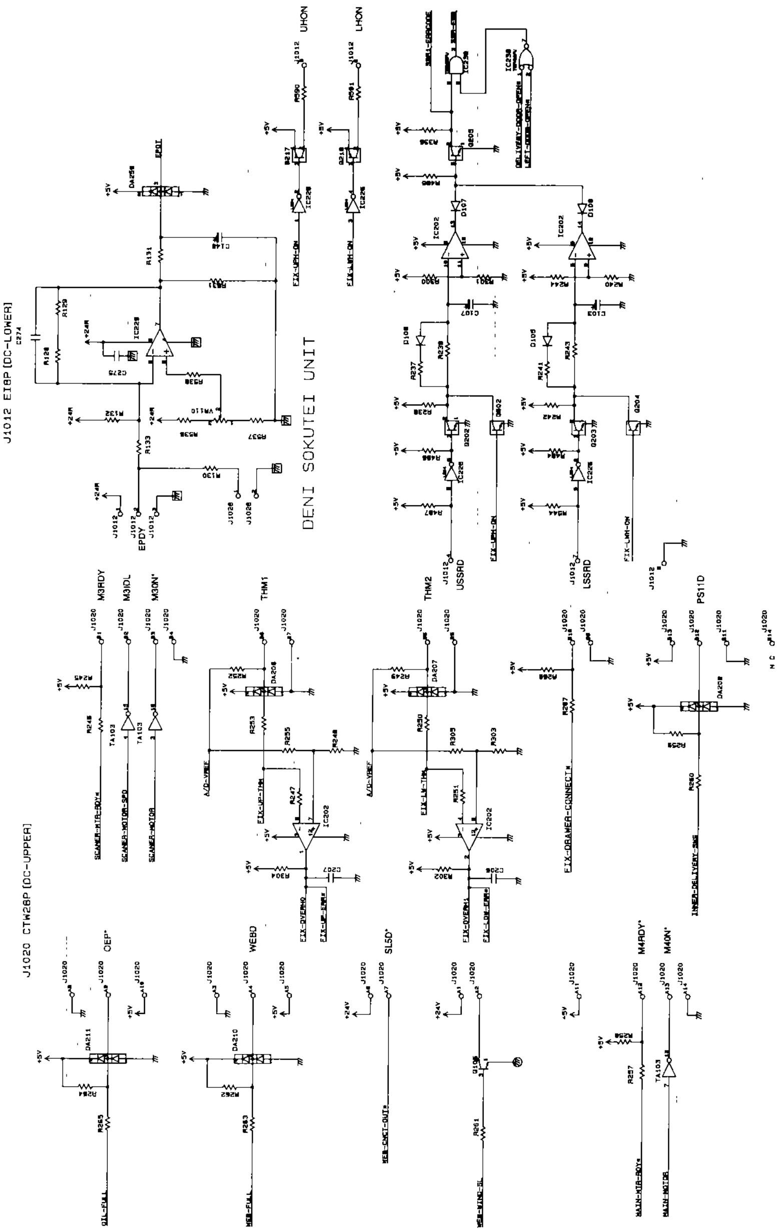
DC controller circuit diagram (CLC700) (10/21)


DC-CONTROLLER <---> LASER CONTROLLER INTERFACE
J1005 40P
J1019
IC203
LS245
RA101
RA102
+5V
8
13
DBUS<15..0>
WRD#
BETACS#
ABUS<23..0>
IC205
LS244
IC204
BETACS#
WRD#
HLWRN
LC-RESET
LC-ITOP-OUT
LC-HSYNC
IC216
IC209
R115
R116
R137

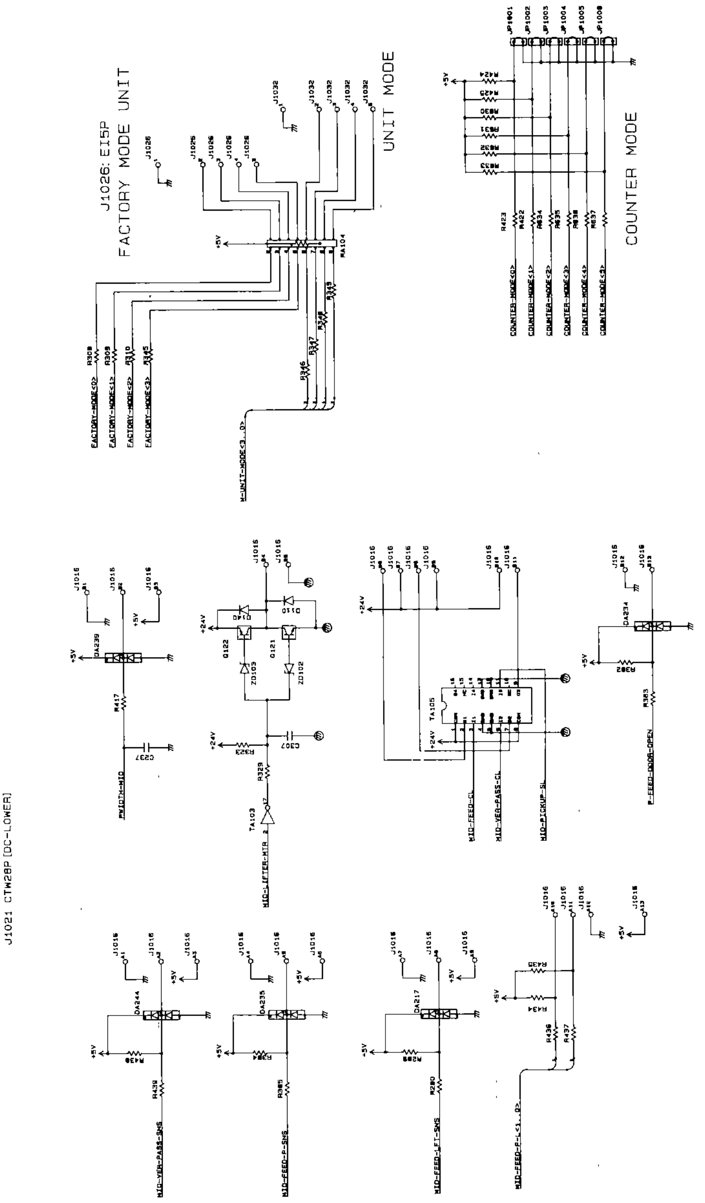
DC controller circuit diagram (CLC700) (11/21)


J1031: CT14P
J1018: CTW24P [DC-UPPER]
CONNECT TO READER CONTROLLER
FM9D
FM3D
FMON
DRUMHP
ITOP_B*
DCPRDY*
RCPOUT2*
DCPOUT2*
RP_RXD2*
RP_TXD2*
RP_TXD1*
RP_RXD1*
DCPOUT1
RXPOUT1*
RCPRDY*
ITOP_A*
PS27D
IP-FAN<1>
IP-FAN<2>
EXH-FAN<1>
EXH-FAN<2>
PCB-FAN1<1>
PCB-FAN1<2>
PCB-FAN2<1>
PCB-FAN2<2>
DCP1-FAN-ERR
SSR2-ON/OFF*
DRUM-HP
ITOP-B
DCPRDY
READER-RV-IN<1>
READER-RV-OUT<1>
RXD2
TXD2
TXD1
RXD1
READER-RV-OUT<0>
READER-RV-IN<0>
DCPRDY
ITOP-A
OUTER-DELIVERY-SNS
+24V
+5V
REV2
IC201
IC207
IC220
IC221
DA220
DA221
DA206

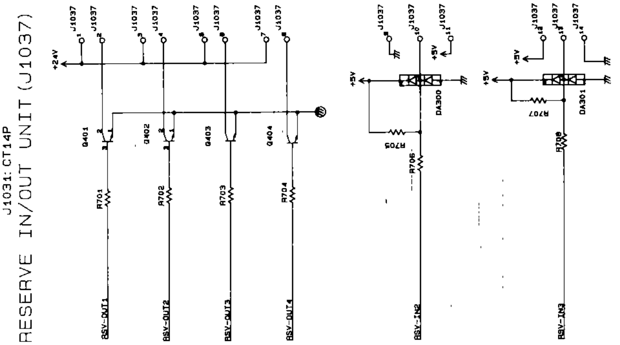
DC controller circuit diagram (CLC700) (12/21)

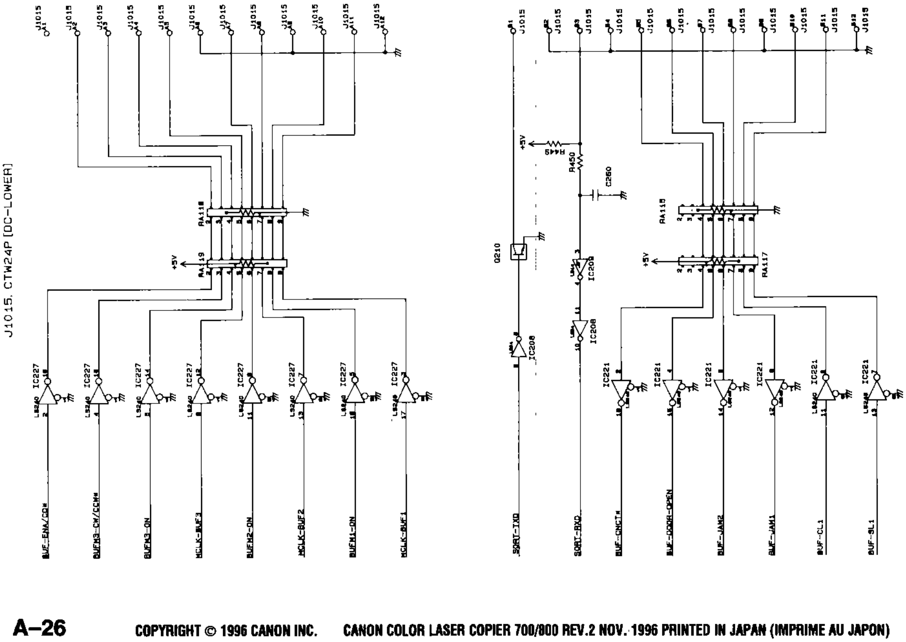

J1012 EI8P [DC-LOWER]
J1020 CTW28P [DC-UPPER]
DENI SOKUTEI UNIT
UHON
LHON
EPDI
EPDY
USSRD
LSSRD
PS11D
M3RDY
M3IDL
M3ON'
THM1
THM2
OEP'
WEBD
SL5D'
M4RDY'
M4ON'
+5V
+24V

DC controller circuit diagram (CLC700) (13/21)

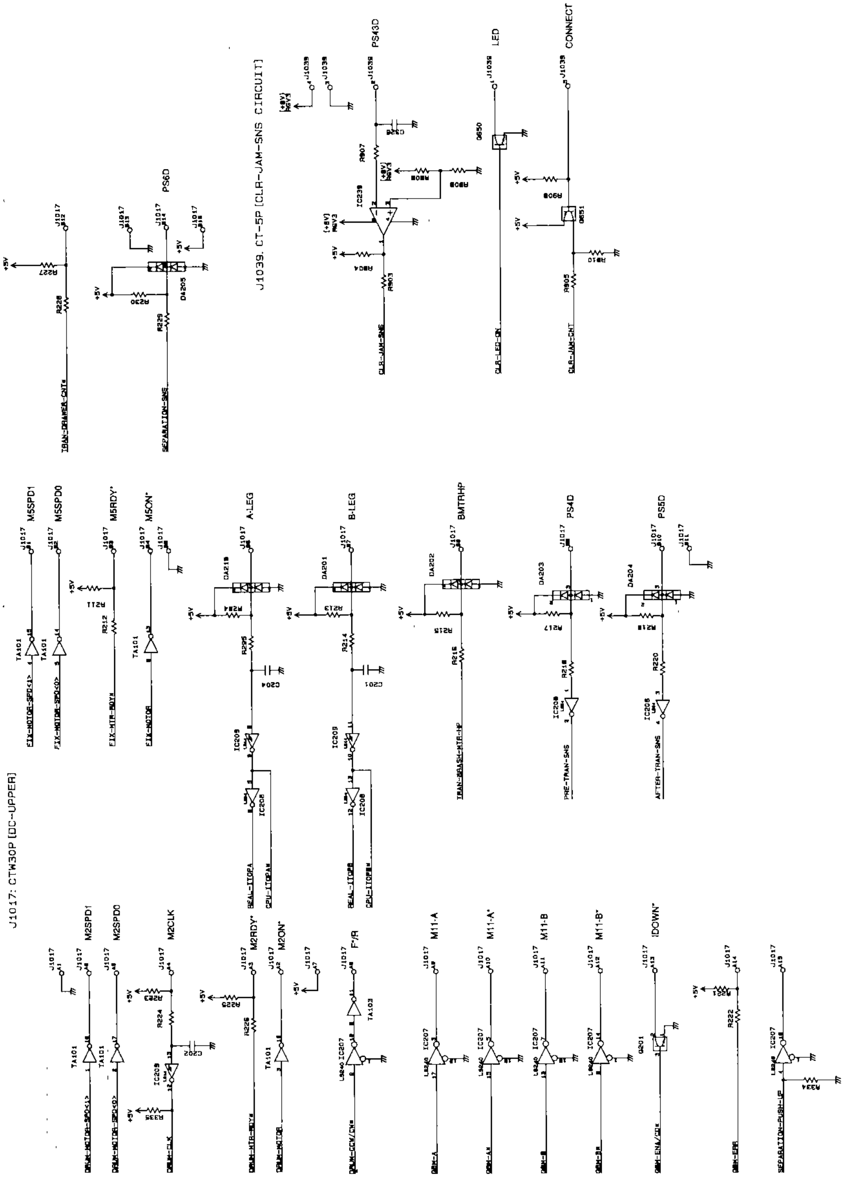

J1026: EI5P
FACTORY MODE UNIT
UNIT MODE
COUNTER MODE
J1021 CTW28P [DC-LOWER]
J1026
J1032
JP1001
JP1002
JP1003
JP1004
JP1005
JP1006
J1016
+5V
+24V
RA104
FACTORY-MODE<0>
FACTORY-MODE<1>
FACTORY-MODE<2>
FACTORY-MODE<3>
U-UNIT-MODE<3..0>
COUNTER-MODE<0>
COUNTER-MODE<1>
COUNTER-MODE<2>
COUNTER-MODE<3>
COUNTER-MODE<4>
COUNTER-MODE<5>
PWIDTH-MID
MID-LIFTER-MTR
MID-FEED-CL
MID-VER-PASS-CL
MID-PICKUP-SL
P-FEED-DOOR-OPEN
MID-VER-PASS-SNS
MID-FEED-P-SNS
MID-FEED-LFT-SNS
MID-FEED-P-L<1..0>
TA103
TA105
Q121
Q122
ZD102
ZD103
DA239
DA234
DA244
DA235
DA217
C237
C307

DC controller circuit diagram (CLC700) (14/21)

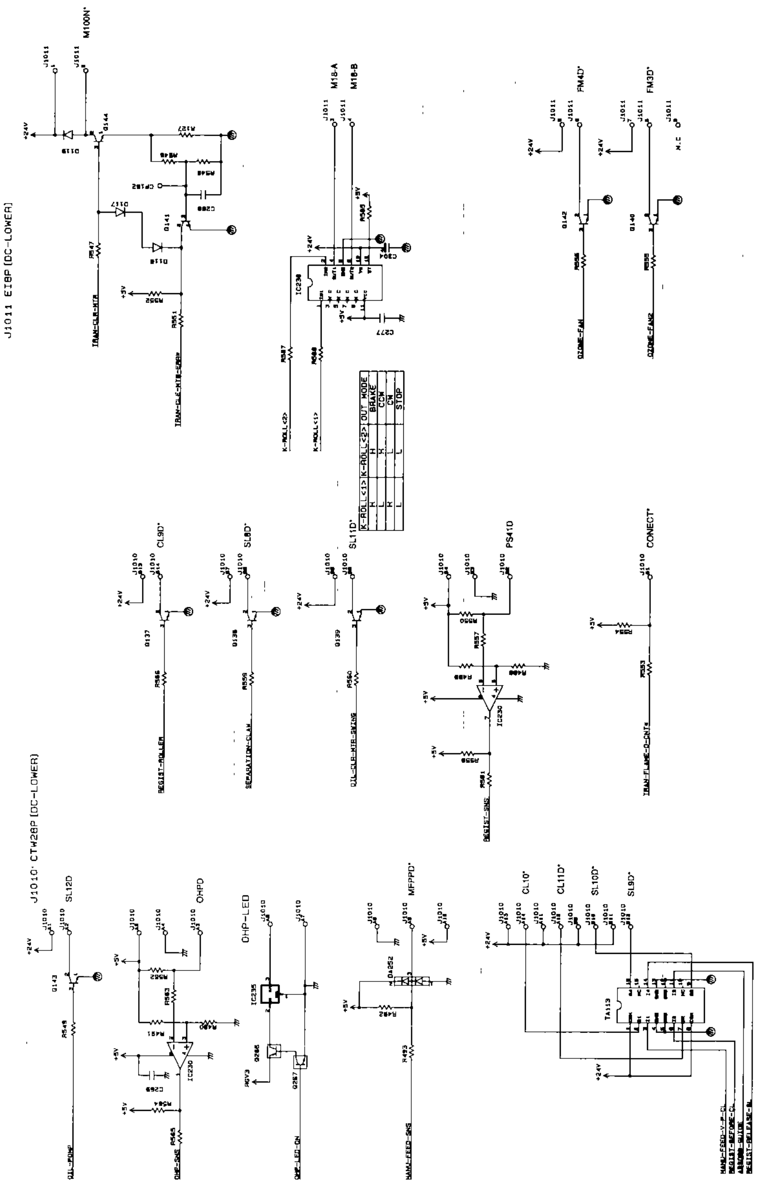

RESERVE IN/OUT UNIT (J1037)
J1031: CT14P
J1037
+24V
+5V
Q401
Q402
Q403
Q404
R701
R702
R703
R704
R705
R706
R707
R708
DA300
DA301
RSV-OUT1
RSV-OUT2
RSV-OUT3
RSV-OUT4
RSV-IN2
RSV-IN3


J1015, CTW24P [DC-LOWER]
J1015
+5V
RA118
RA119
RA115
RA117
IC227
IC221
IC208
IC202
LS240
Q210
R449
R450
C250
BUF-ENA/CR*
BUFM3-CW/CCW*
BUFM3-ON
MCLK-BUF3
BUFM2-ON
MCLK-BUF2
BUFM1-ON
MCLK-BUF1
SORT-TXD
SORT-RXD
BUF-CNCT*
BUF-DOOR-OPEN
BUF-JAM2
BUF-JAM1
BUF-CL1
BUF-SL1

DC controller circuit diagram (CLC700) (15/21)

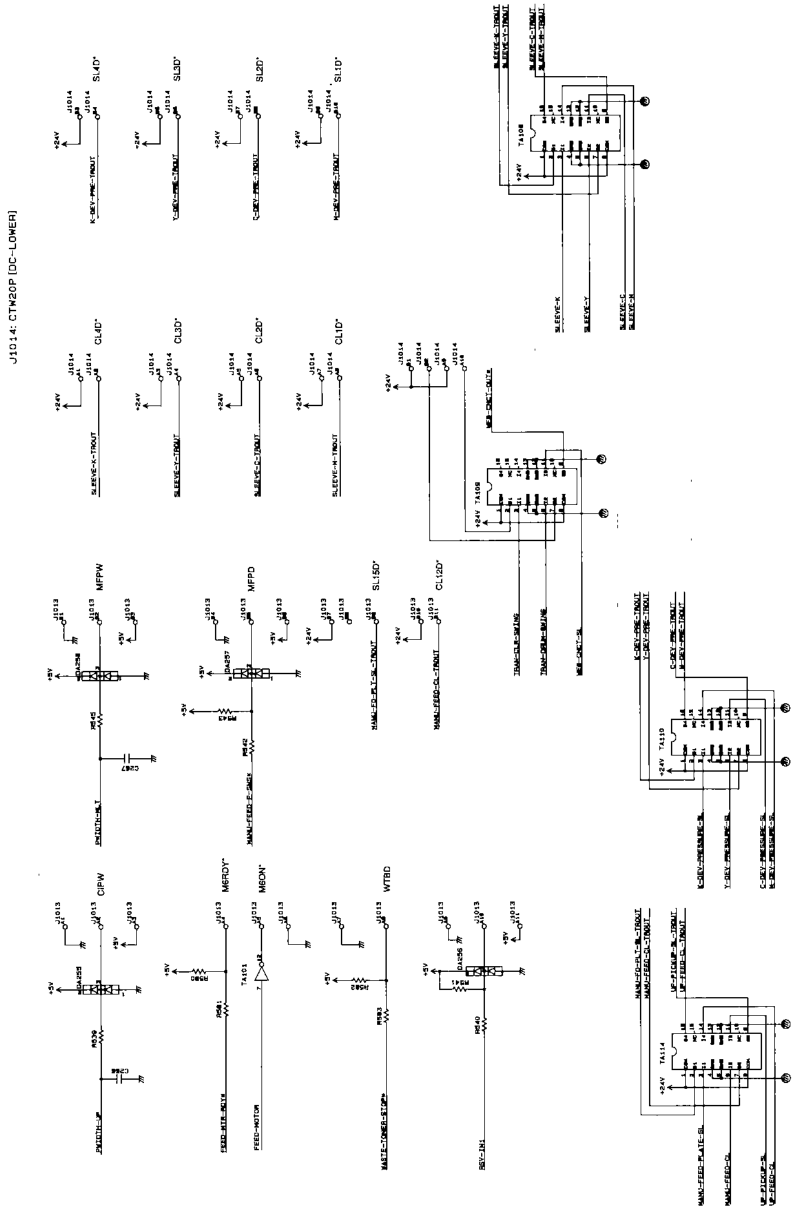

J1039, CT-5P [CLR-JAM-SNS CIRCUIT]
J1017: CTW30P [DC-UPPER]
PS43D
LED
CONNECT
PS6D
TRAN-DRAWER-CNT*
SEPARATION-SNS
CLR-JAM-SNS
CLR-LED-ON
CLR-JAM-CNT
M5SPD1
M5SPD0
M5RDY*
M5ON*
A-LEG
B-LEG
BMTRHP
PS4D
PS5D
FIX-MOTOR-SPD<1>
FIX-MOTOR-SPD<0>
FIX-MTR-RDY*
FIX-MOTOR
REAL-ITOPA
CPU-ITOPA*
REAL-ITOPB
CPU-ITOPB*
TRAN-BRASH-MTR-HP
PRE-TRAN-SNS
AFTER-TRAN-SNS
M2SPD1
M2SPD0
M2CLK
M2RDY*
M2ON*
F/R
M11-A
M11-A*
M11-B
M11-B*
IDOWN*
DRUM-MOTOR-SPD<1>
DRUM-MOTOR-SPD<0>
DRUM-CLK
DRUM-MTR-RDY*
DRUM-MOTOR
DRUM-CCW/CW*
DRM-A
DRM-A*
DRM-B
DRM-B*
DRM-ENA/DR*
SEPARATION-PUSH-UP

DC controller circuit diagram (CLC700) (16/21)

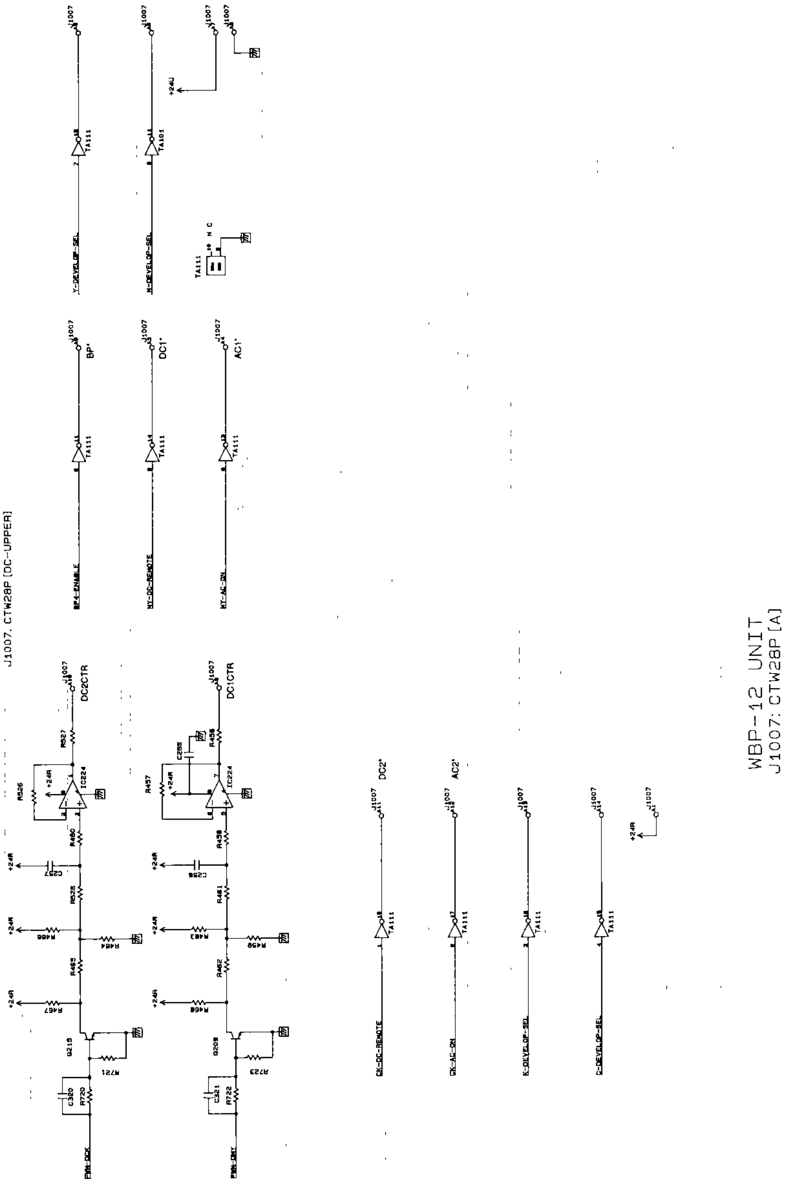

J1011 EI8P [DC-LOWER]
J1010' CTW28P [DC-LOWER]
M100N'
M18-A
M18-B
FM4D'
FM3D'
N.C
+24V
+5V
Q144
Q141
Q142
Q140
Q137
Q138
Q139
Q143
IC230
IC235
TA113
DA252
Q266
Q267
RGV3
TRAN-CLN-MTR
TRAN-CLE-MTR-ERR
K-ROLL<2>
K-ROLL<1>
OZONE-FAN
OZONE-FAN2
CL9D'
SL8D'
SL11D'
PS41D
CONECT'
REGIST-ROLLER
SEPARATION-CLAW
OIL-CLR-MTR-SWING
REGIST-SNS
TRAN-FLAME-O-CNTN
SL12D
OHPD
OHP-LED
MFPPD'
CL10'
CL11D'
SL10D'
SL9D'
OIL-PUMP
OHP-SNS
OHP-LED-ON
MANU-FEED-SNS
MANU-FEED-V-P-CL
REGIST-BEFORE-CL
ABSORB-GUIDE
REGIST-RELEASE-SL

K-ROLL<1>	K-ROLL<2>	OUT MODE
H	H	BRAKE
L	H	CCW
H	L	CW
L	L	STOP

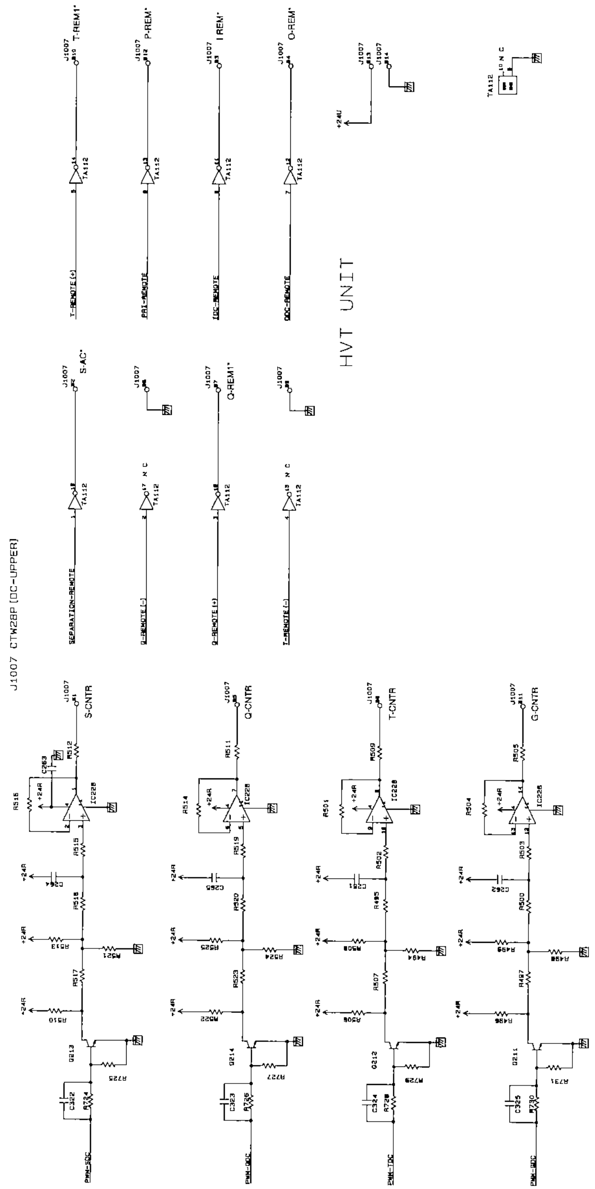
DC controller circuit diagram (CLC700) (17/21)


J1014: CTW20P [DC-LOWER]
J1013: CTW22P [DC-LOWER]
SL4D*
SL3D*
SL2D*
SL1D*
CL4D*
CL3D*
CL2D*
CL1D*
MFPW
MFPD
SL15D*
CL12D*
CIPW
M6RDY*
M6ON*
WTBD
K-DEV-PRE-TROUT
Y-DEV-PRE-TROUT
C-DEV-PRE-TROUT
M-DEV-PRE-TROUT
SLEEVE-K-TROUT
SLEEVE-Y-TROUT
SLEEVE-C-TROUT
SLEEVE-M-TROUT
SLEEVE-K
SLEEVE-Y
SLEEVE-C
SLEEVE-M
TA108
TA109
TA110
TA114
TA101
WEB-CNCT-OUT
TRAN-CLN-SWING
TRAN-DRUM-SWING
WEB-CNCT-SL
K-DEV-PRESSURE-SL
Y-DEV-PRESSURE-SL
C-DEV-PRESSURE-SL
M-DEV-PRESSURE-SL
MANU-FD-PLT-SL-TROUT
MANU-FEED-CL-TROUT
UP-PICKUP-SL-TROUT
UP-FEED-CL-TROUT
MANU-FEED-PLATE-SL
MANU-FEED-CL
UP-PICKUP-SL
UP-FEED-CL
PWIDTH-MLT
MANU-FEED-P-SNSR
PWIDTH-UP
FEED-MTR-RDY
FEED-MOTOR
WASTE-TONER-STOP
REV-IN1
DA258
DA257
DA255
DA256
R545
R543
R542
R539
R580
R581
R582
R583
R541
R540
C267
C266
+24V
+5V

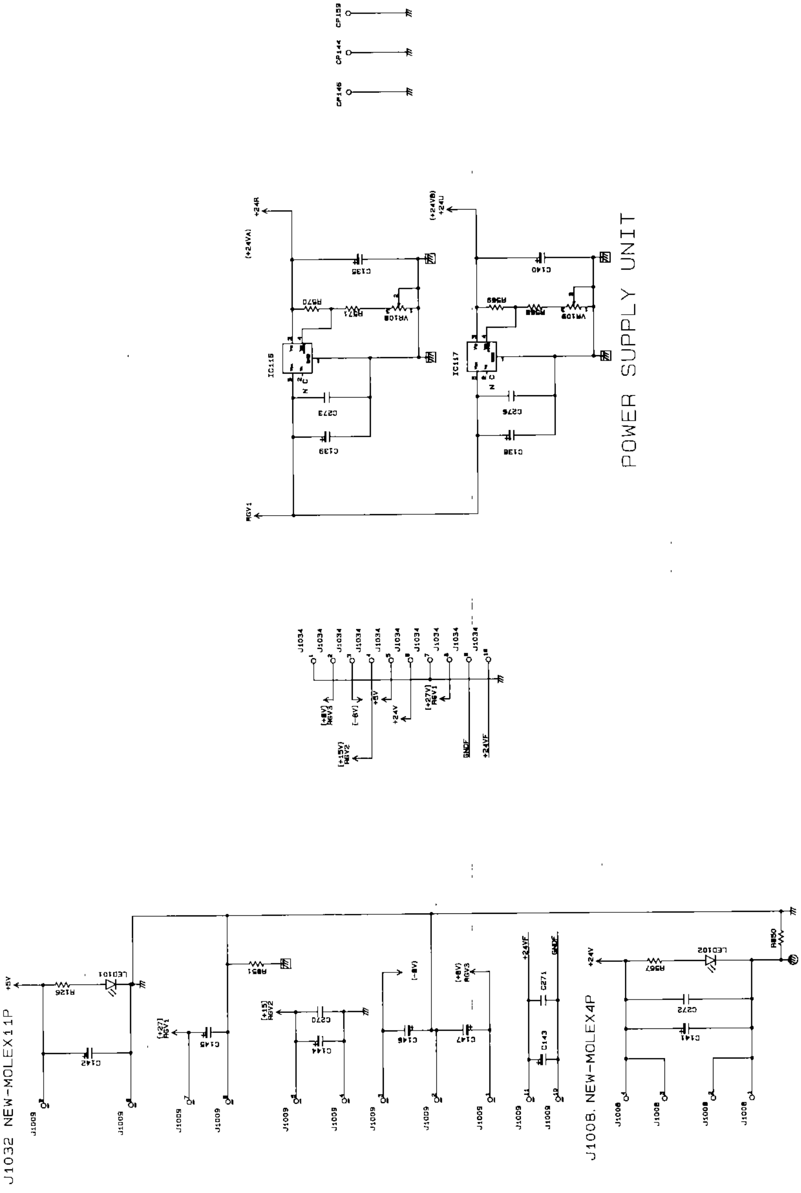
DC controller circuit diagram (CLC700) (18/21)


J1007. CTW28P [DC-UPPER]
WBP-12 UNIT
J1007: CTW28P[A]
Y-DEVELOP-SEL
M-DEVELOP-SEL
BP4-ENABLE
MY-DC-REMOTE
MY-AC-ON
CK-DC-REMOTE
CK-AC-ON
K-DEVELOP-SEL
C-DEVELOP-SEL
PWM-DCK
PWM-DMY
BP*
DC1*
AC1*
DC2*
AC2*
DC2CTR
DC1CTR
TA111
TA101
IC224
+24R
+24U
N C

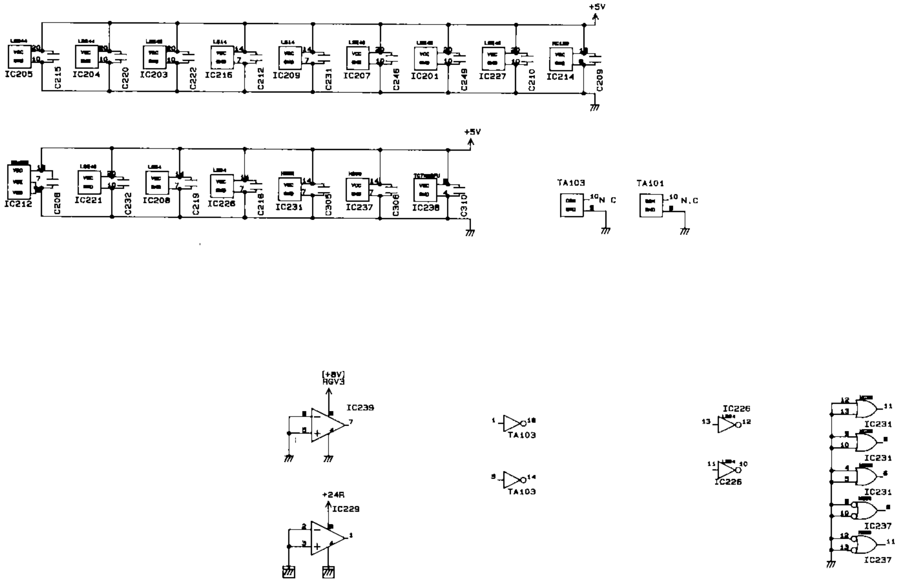
DC controller circuit diagram (CLC700) (19/21)


J1007 CTW28P [DC-UPPER]
HVT UNIT
J1007
T-REM1*
P-REM*
I REM*
O-REM*
+24U
TA112
N C
T-REMOTE(+)
PRI-REMOTE
IDC-REMOTE
ODC-REMOTE
S-AC*
Q-REM1*
SEPARATION-REMOTE
Q-REMOTE(-)
Q-REMOTE(+)
T-REMOTE(-)
S-CNTR
Q-CNTR
T-CNTR
G-CNTR
IC228
+24R
Q213
Q214
Q212
Q211
PWM-SDC
PWM-QDC
PWM-TDC
PWM-GDC

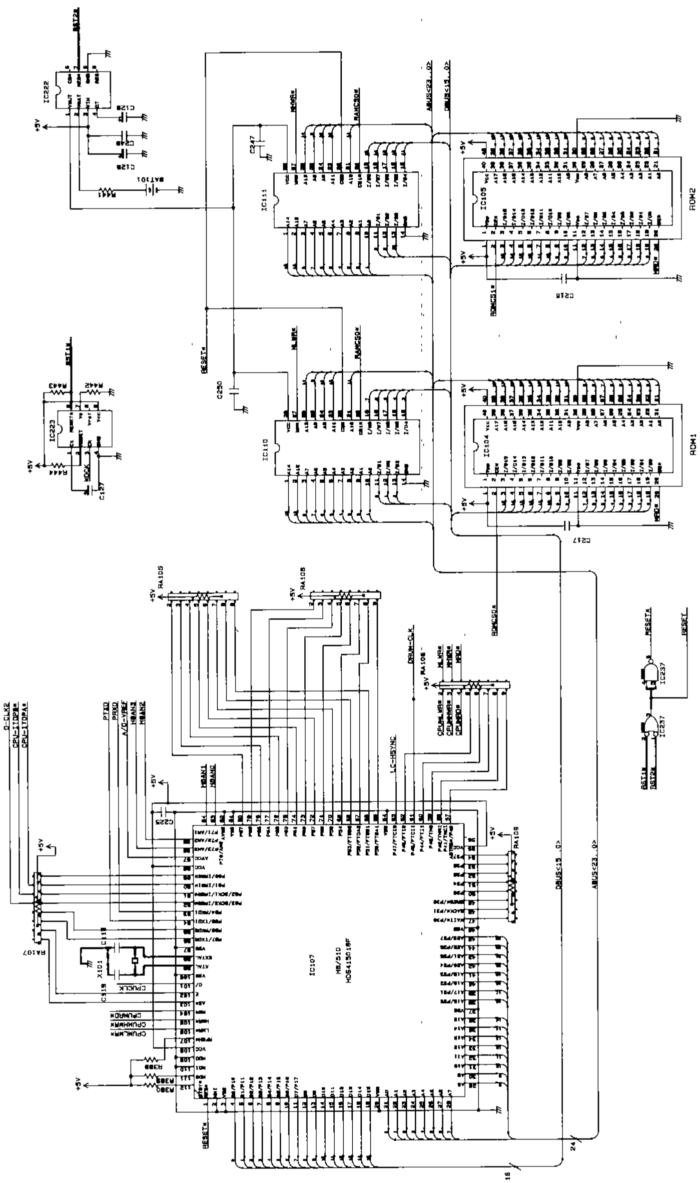
DC controller circuit diagram (CLC700) (20/21)


CP159
CP144
CP146
+24R
(+24VA)
(+24VB)
+24U
C135
R570
R571
VR108
IC116
C273
C139
C140
R569
R568
VR109
IC117
C275
C138
RGV1
POWER SUPPLY UNIT
J1034
(+8V) RGV3
(-8V)
+5V
+24V
(+27V) RGV1
(+15V) RGV2
GNDF
+24VF
J1032 NEW-MOLEX11P
+5V
R126
LED101
C142
(+27) RGV1
C145
R851
(+15) RGV2
C270
C144
(-8V)
(+8V) RGV3
C146
C147
+24VF
GNDF
C271
C143
J1009
J1008. NEW-MOLEX4P
+24V
R567
LED102
R850
C272
C141
J1008

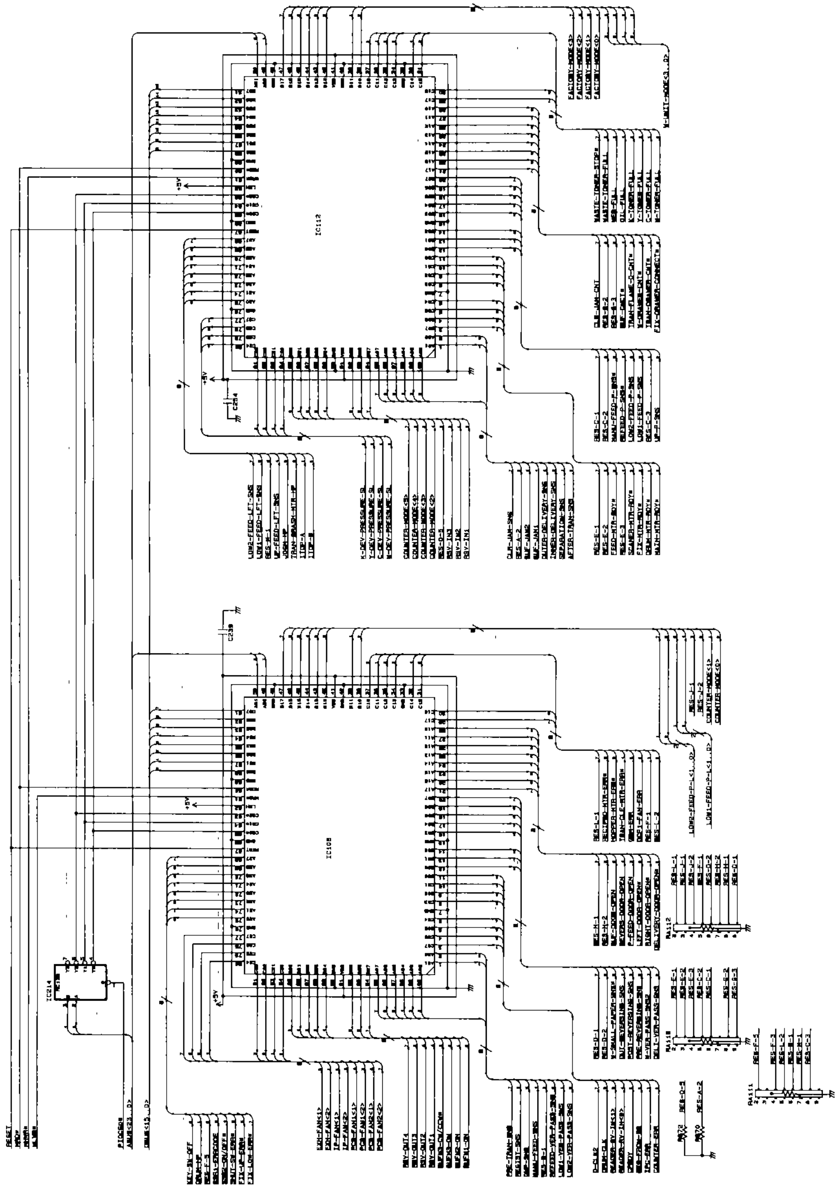
DC controller circuit diagram (CLC700) (21/21)


+5V
IC205
C215
IC204
C220
IC203
C222
IC216
C212
IC209
C231
IC207
C246
IC201
C249
IC227
C210
IC214
C209
+5V
IC212
C208
IC221
C232
IC208
C219
IC226
C218
IC231
C305
IC237
C306
IC238
C310
TA103
N.C
TA101
N.C
[+8V]
HGV3
IC239
+24R
IC229
TA103
TA103
IC226
IC226
IC231
IC231
IC231
IC237
IC237

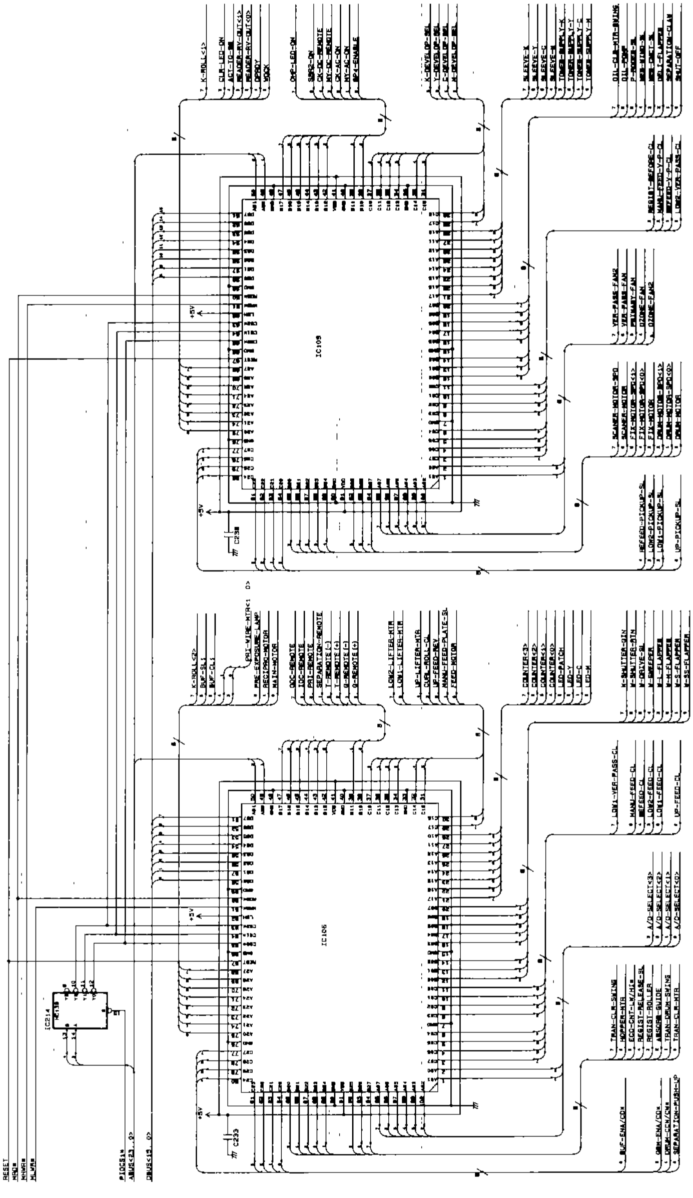
DC controller circuit diagram (CLC800) (1/22)


IC222
BAT101
IC223
IC111
IC110
IC105
IC104
ROM2
ROM1
C247
C250
C216
C217
RA105
RA107
RA106
IC107
H8/510
HD6415018F
X101
C225
IC237
ABUS<23..0>
DBUS<15..0>
RESET*
ROMCS0*
ROMCS1*
RAMCS0*
DRUM-CLK
LC-HSYNC
CPUCLK
+5V
24
16

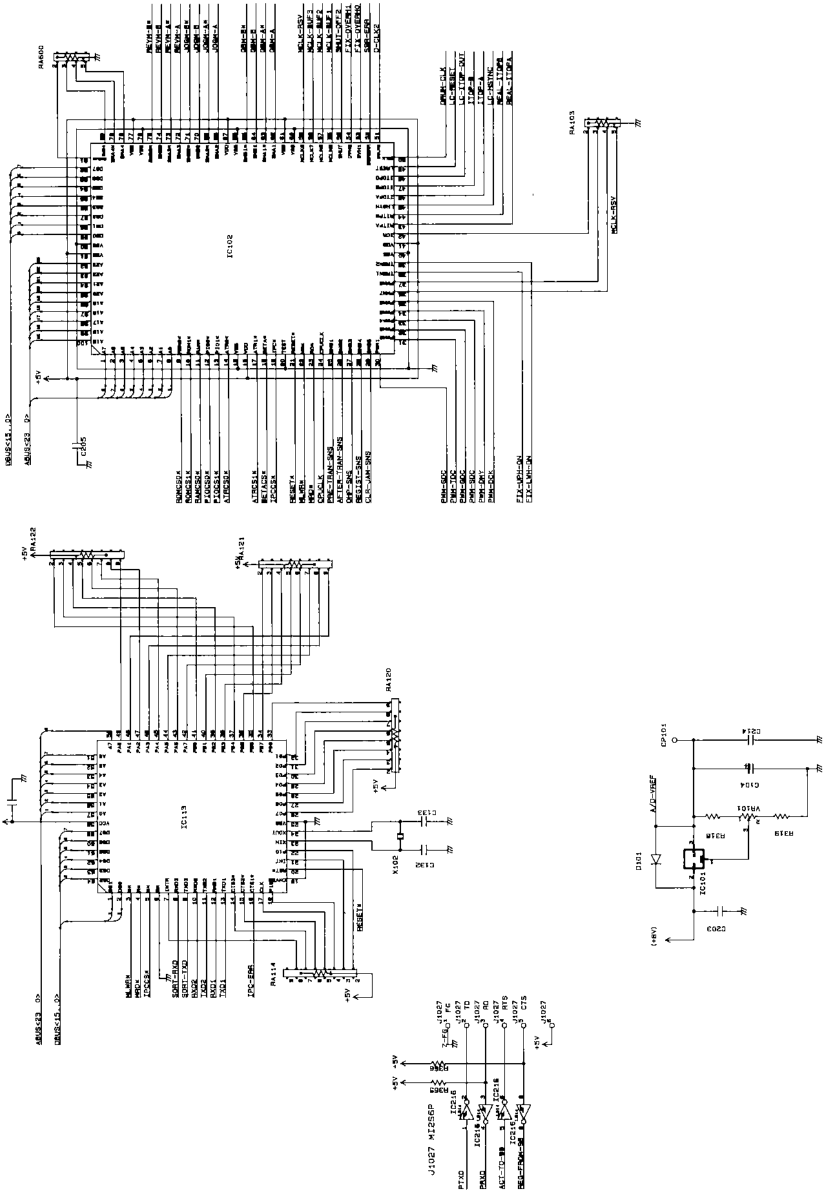
DC controller circuit diagram (CLC800) (2/22)


IC112
IC108
IC214
C254
C238
+5V
RA112
RA110
RA111

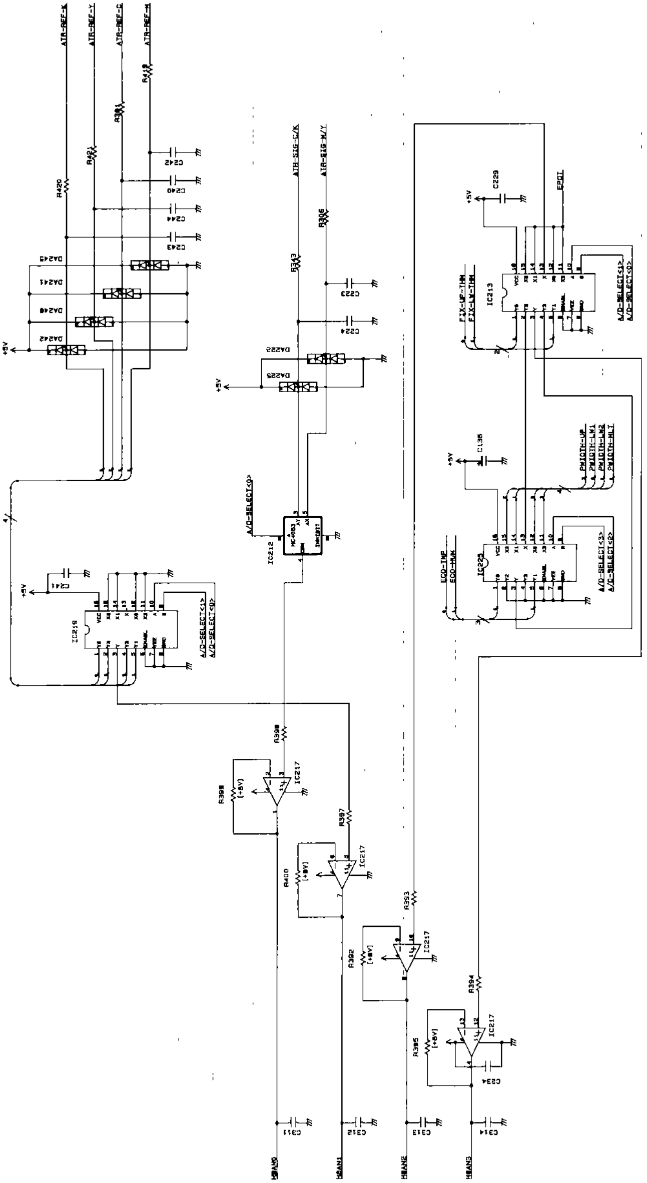
DC controller circuit diagram (CLC800) (3/22)


K-ROLL<1>
CLN-LED-ON
READER-RY-OUT<1>
READER-RY-OUT<0>
OPRDY
WOCK
OHP-LED-ON
SSR2-ON
CK-DC-REMOTE
MY-DC-REMOTE
CK-AC-ON
MY-AC-ON
SP4-ENABLE
K-DEVELOP-SEL
Y-DEVELOP-SEL
C-DEVELOP-SEL
M-DEVELOP-SEL
SLEEVE-K
SLEEVE-Y
SLEEVE-C
SLEEVE-M
TONER-SUPPLY-K
TONER-SUPPLY-Y
TONER-SUPPLY-C
TONER-SUPPLY-M
OIL-CLN-MTR-SWING
OIL-PUMP
DELI-FLAPPER
SEPARATION-CLAW
SHUT-OFF
REGIST-BEFORE-CL
MANU-FEED-Y-P-CL
REFEED-Y-P-CL
LOW2-VER-PASS-CL
VER-PASS-FAN2
VER-PASS-FAN
PRIMARY-FAN
OZONE-FAN
OZONE-FAN2
SCANNER-MOTOR-SPD
SCANNER-MOTOR
FIX-MOTOR-SPD<1>
FIX-MOTOR-SPD<0>
FIX-MOTOR
DRUM-MOTOR-SPD<1>
DRUM-MOTOR-SPD<0>
DRUM-MOTOR
REFEED-PICKUP-SL
LOW2-PICKUP-SL
LOW1-PICKUP-SL
UP-PICKUP-SL
IC109
+5V
C238
K-ROLL<2>
BUF-SL1
BUF-CL1
PRI-WIRE-MTR<1..0>
PRE-EXPOSURE-LAMP
RECIPRO-MOTOR
MAIN-MOTOR
PRI-REMOTE
SEPARATION-REMOTE
LOW2-LIFTER-MTR
LOW1-LIFTER-MTR
UP-LIFTER-MTR
UP-FEED-REV
MANU-FEED-PLATE-SL
FEED-MOTOR
COUNTER<3>
COUNTER<2>
COUNTER<1>
COUNTER<0>
LED-PATCH
LED-Y
LED-C
LED-M
LOW1-VER-PASS-CL
MANU-FEED-CL
REFEED-CL
LOW2-FEED-CL
LOW1-FEED-CL
UP-FEED-CL
A/D-SELECT<3>
A/D-SELECT<2>
A/D-SELECT<1>
A/D-SELECT<0>
TRAN-CLN-SWING
REGIST-RELEASE-SL
REGIST-ROLLER
ABSORB-GUIDE
TRAN-DRUM-SWING
TRAN-CLN-MTR
BUF-ENA/CH*
SEPARATION-PUSH-UP
IC106
C233
IC214
HC138
RESET
MRD*
MWR*
MLWR*
PIOCS1*
ABUS<23..0>
DBUS<15..0>

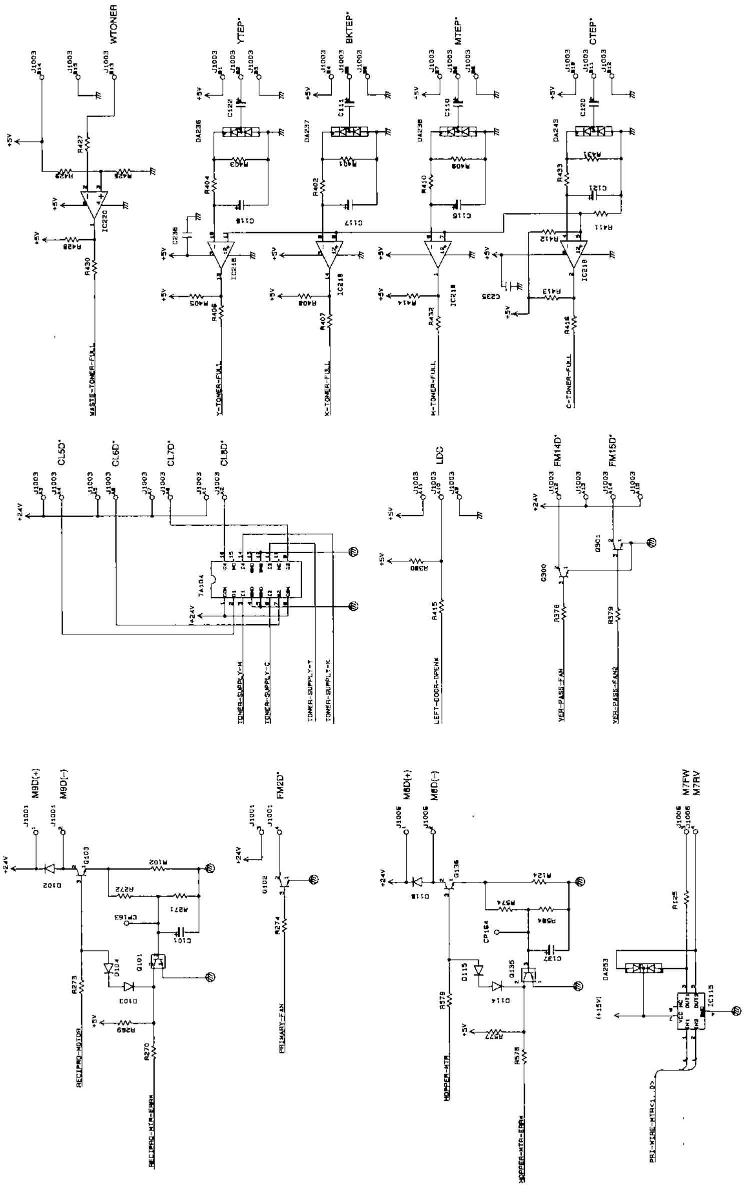
DC controller circuit diagram (CLC800) (4/22)


RA600
REVM-B*
REVM-B
REVM-A*
REVM-A
JOGM-B*
JOGM-B
JOGM-A*
JOGM-A
DRM-B*
DRM-B
DRM-A*
DRM-A
MCLK-RSV
MCLK-BUF3
MCLK-BUF2
MCLK-BUF1
SHUT-OFF2
FIX-OVERH1
FIX-OVERHO
SDR-ERR
D-CLK2
DRUM-CLK
LC-RESET
LC-ITOP-OUT
ITOP-B
ITOP-A
LC-HSYNC
REAL-ITOPB
REAL-ITOPA
RA103
MCLK-RSV
IC102
+5V
DBUS<15..0>
ABUS<23..0>
C205
ROMCS0*
ROMCS1*
RAMCS0*
PIOCS0*
PIOCS1*
ATRCS0*
ATRCS1*
RETACS*
IPCCS*
RESET*
HLWR*
MRD*
CPUCLK
PRE-TRAN-SNS
AFTER-TRAN-SNS
OHP-SNS
REGIST-SNS
CLR-JAM-SNS
PWM-GDC
PWM-TDC
PWM-ODC
PWM-SDC
PWM-DMY
PWM-DCK
FIX-UPH-ON
FIX-LWH-ON
RA122
RA121
RA120
IC113
C253
C133
C132
X102
RESET*
HLWR*
MRD*
IPCCS*
SDRT-RXD
SDRT-TXD
RXD2
TXD2
RXD1
TXD1
IPC-ERR
RA114
ABUS<23..0>
DBUS<15..0>
CP101
C214
C104
VR101
R318
R319
A/D-VREF
D101
IC101
C203
(+8V)
J1027 FG
J1027 TD
J1027 RD
J1027 RTS
J1027 CTS
J1027
Z-FG
R366
R365
IC216
J1027 MI2S6P
PTXD
PRXD
ACT-TO-MD
REQ-FROM-MD

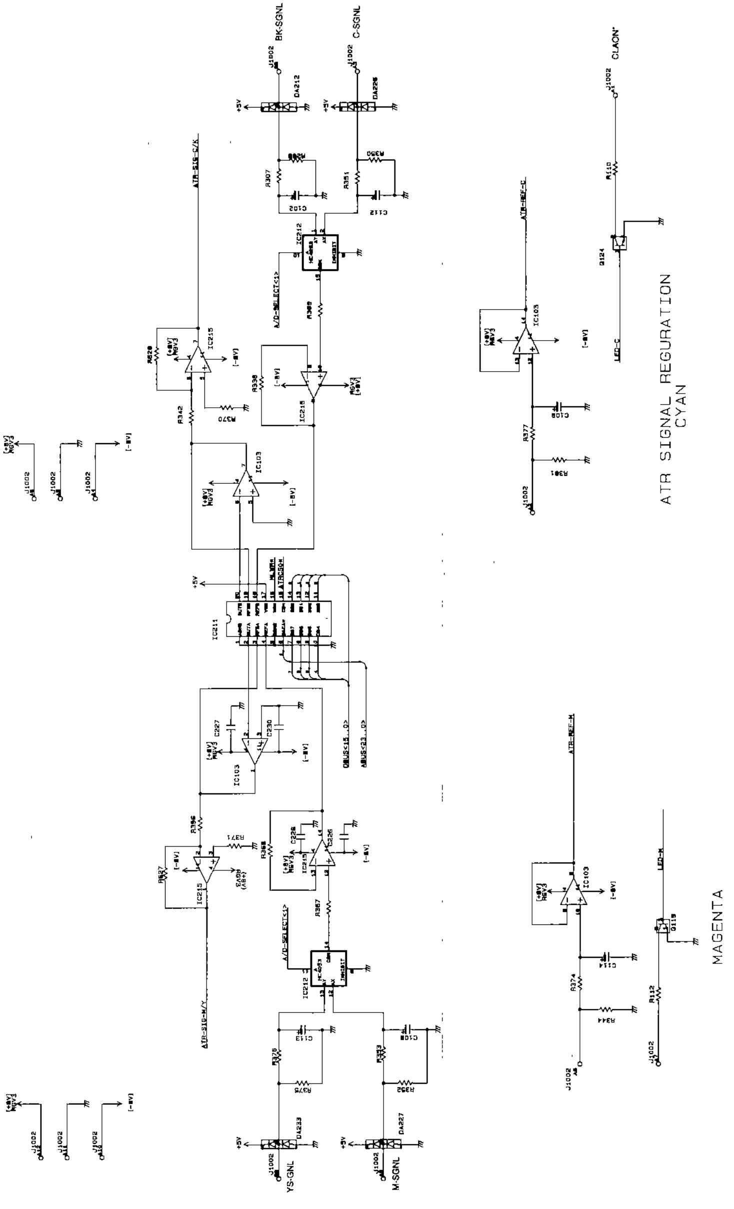
DC controller circuit diagram (CLC800) (5/22)


ATR-REF-K
ATR-REF-Y
ATR-REF-C
ATR-REF-M
ATR-SIG-C/K
ATR-SIG-M/Y
EPOT
FIX-UP-THM
FIX-LW-THM
PWIDTH-UP
PWIDTH-LW1
PWIDTH-LW2
PWIDTH-MLT
ECO-TMP
ECO-HUM
A/D-SELECT<0>
A/D-SELECT<1>
A/D-SELECT<2>
A/D-SELECT<3>
IC219
IC212
IC213
IC224
IC217
+5V
HBAN0
HBAN1
HBAN2
HBAN3

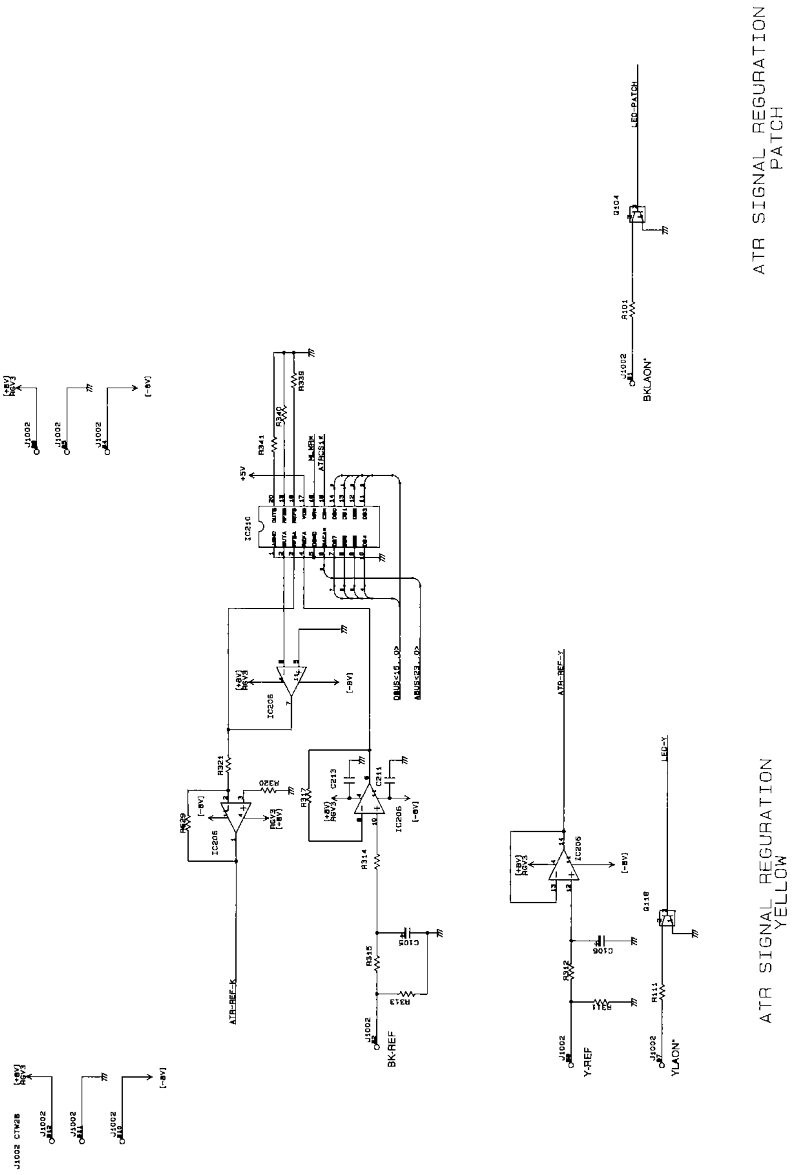
DC controller circuit diagram (CLC800) (6/22)


WTONER
YTEP*
BKTEP*
MTEP*
CTEP*
WASTE-TONER-FULL
Y-TONER-FULL
K-TONER-FULL
M-TONER-FULL
C-TONER-FULL
CL5D*
CL6D*
CL7D*
CL8D*
TA104
TONER-SUPPLY-M
TONER-SUPPLY-C
TONER-SUPPLY-Y
TONER-SUPPLY-K
LDC
LEFT-DOOR-OPEN
FM14D*
FM15D*
VER-PASS-FAN
VER-PASS-FAN2
M9D(+)
M9D(-)
RECIPRO-MOTOR
RECIPRO-MTR-ERR
FM2D*
PRIMARY-FAN
M8D(+)
M8D(-)
HOPPER-MTR
HOPPER-MTR-ERR
M7FW
M7RV
PRI-WIRE-MTR
+5V
+24V
(+15V)
J1003
J1001
J1006
J1005

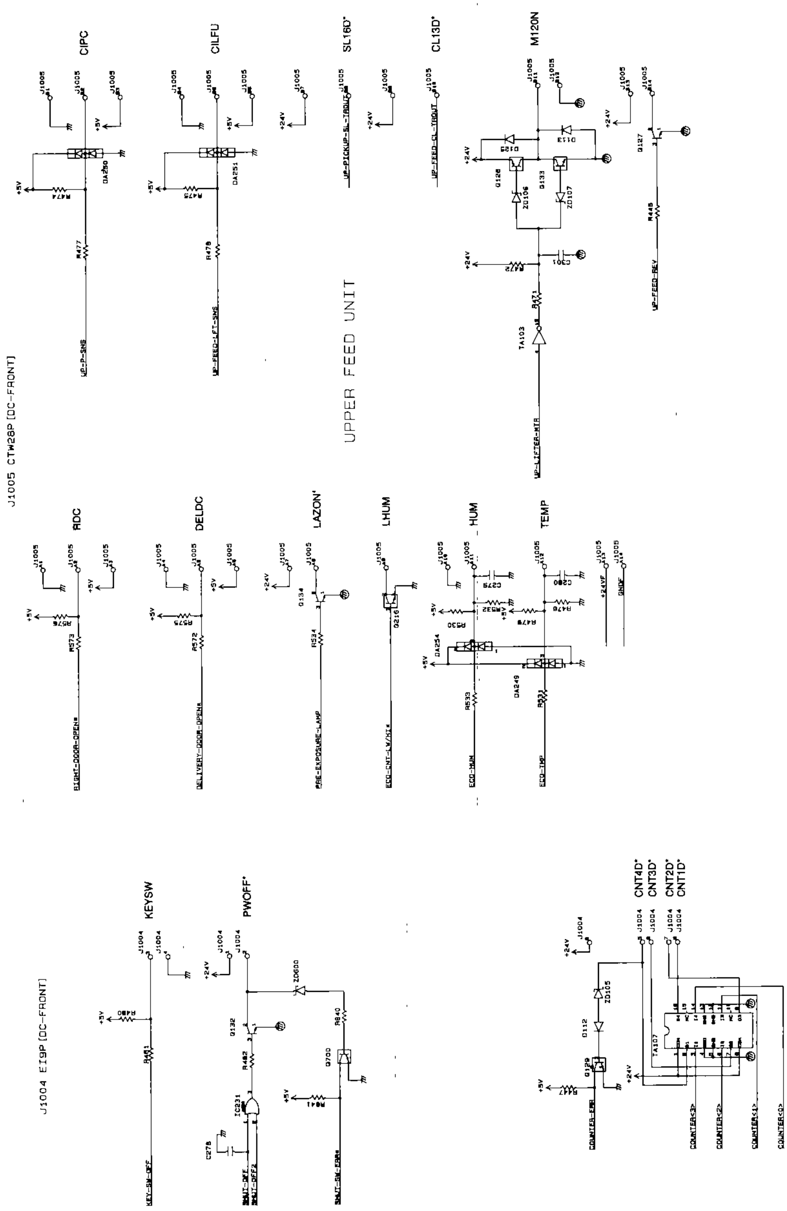
DC controller circuit diagram (CLC800) (7/22)


J1002
BK-SGNL
C-SGNL
CLAON*
+5V
DA212
DA226
R307
R351
C102
C112
IC212
A/D-SELECT<1>
ATR-SIG-C/K
R628
IC215
R342
R370
R338
R369
IC103
(+8V)
NGV3
(-8V)
ATR-REF-C
R377
C108
LED-C
Q124
R110
ATR SIGNAL REGURATION
CYAN
IC211
DBUS<15..0>
ABUS<23..0>
C227
C230
R336
R371
R627
R368
C226
C225
R367
ATR-SIG-M/Y
C113
C109
R376
R375
R353
R352
DA233
DA227
YS-GNL
M-SGNL
ATR-REF-M
R374
C114
R344
LED-M
Q119
R112
MAGENTA

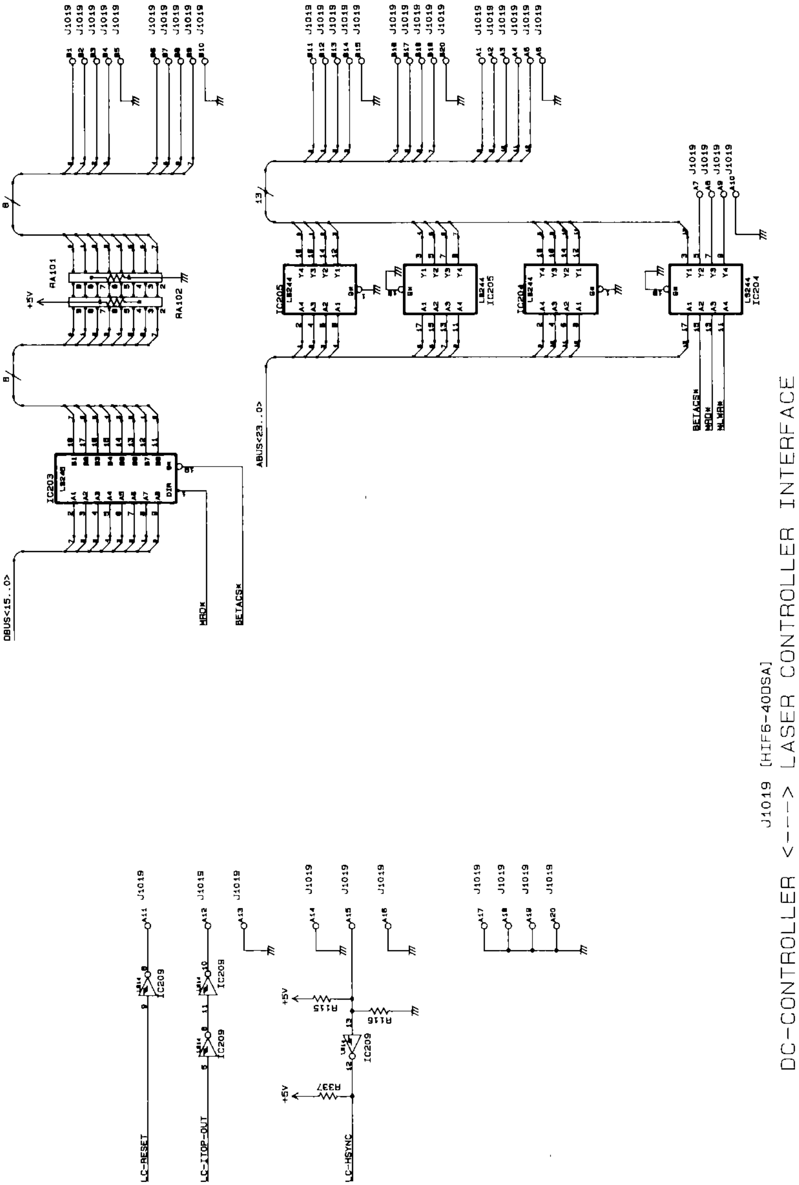
DC controller circuit diagram (CLC800) (8/22)


ATR SIGNAL REGURATION
PATCH
LED-PATCH
Q104
R101
J1002
BKLAON*
IC210
+5V
R341
R340
R339
ATRCS1*
DBUS<15..0>
ABUS<23..0>
IC206
[+8V]
RGV3
[-8V]
R321
R320
R329
R317
C213
C211
R314
C105
R315
R313
ATR-REF-K
BK-REF
ATR-REF-Y
C106
R312
R311
Q118
R111
LED-Y
Y-REF
YLAON*
ATR SIGNAL REGURATION
YELLOW
J1002 CTW28

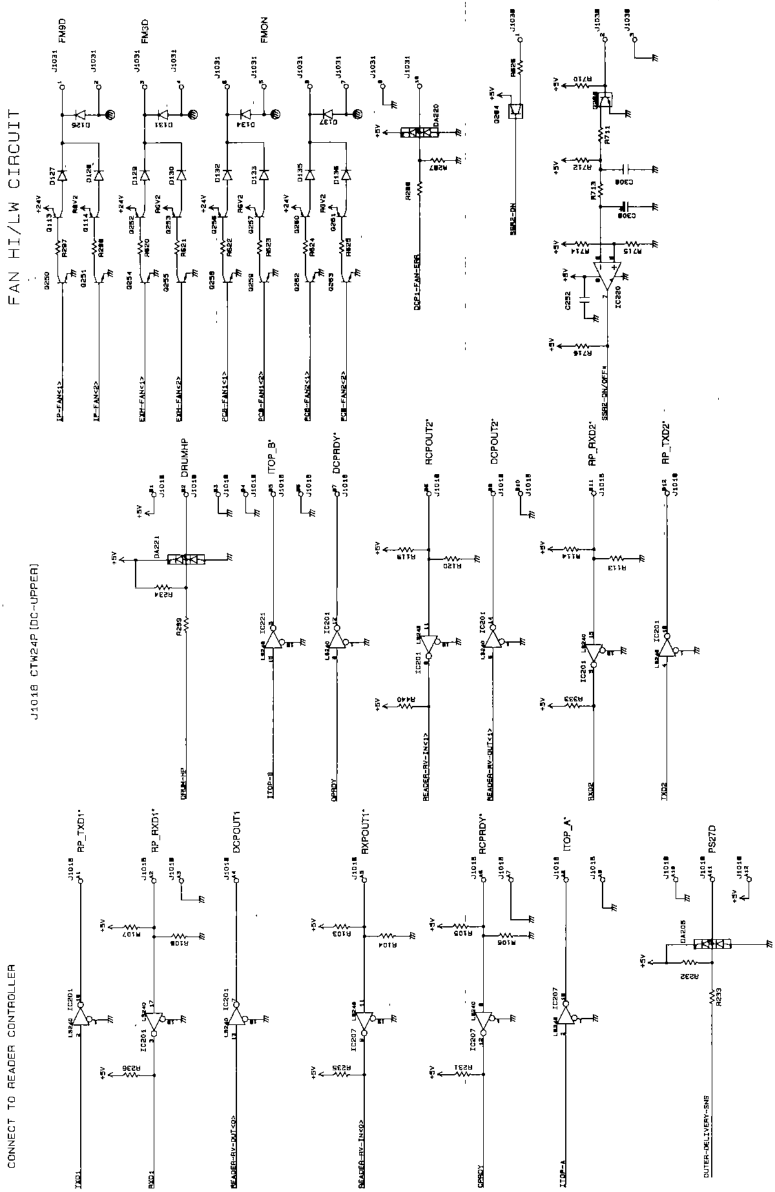
DC controller circuit diagram (CLC800) (9/22)


J1005 CTW28P [DC-FRONT]
UPPER FEED UNIT
CIPC
CILFU
SL16D'
CL13D'
M120N
UP-P-SNS
UP-FEED-LFT-SNS
UP-PICKUP-SL-TROUT
UP-FEED-CL-TROUT
UP-LIFTER-MTR
UP-FEED-REV
RDC
DELDC
LAZON'
LHUM
HUM
TEMP
RIGHT-DOOR-OPEN*
DELIVERY-DOOR-OPEN*
PRE-EXPOSURE-LAMP
ECO-CNT-LW/HI*
ECO-HUM
ECO-TMP
+24VF
GNDF
J1004 EI9P [DC-FRONT]
KEYSW
PWOFF*
KEY-SW-OFF
SHUT-OFF
SHUT-OFF2
SHUT-SW-FB*
CNT4D'
CNT3D'
CNT2D'
CNT1D'
COUNTER-FB*
COUNTER<3>
COUNTER<2>
COUNTER<1>
COUNTER<0>

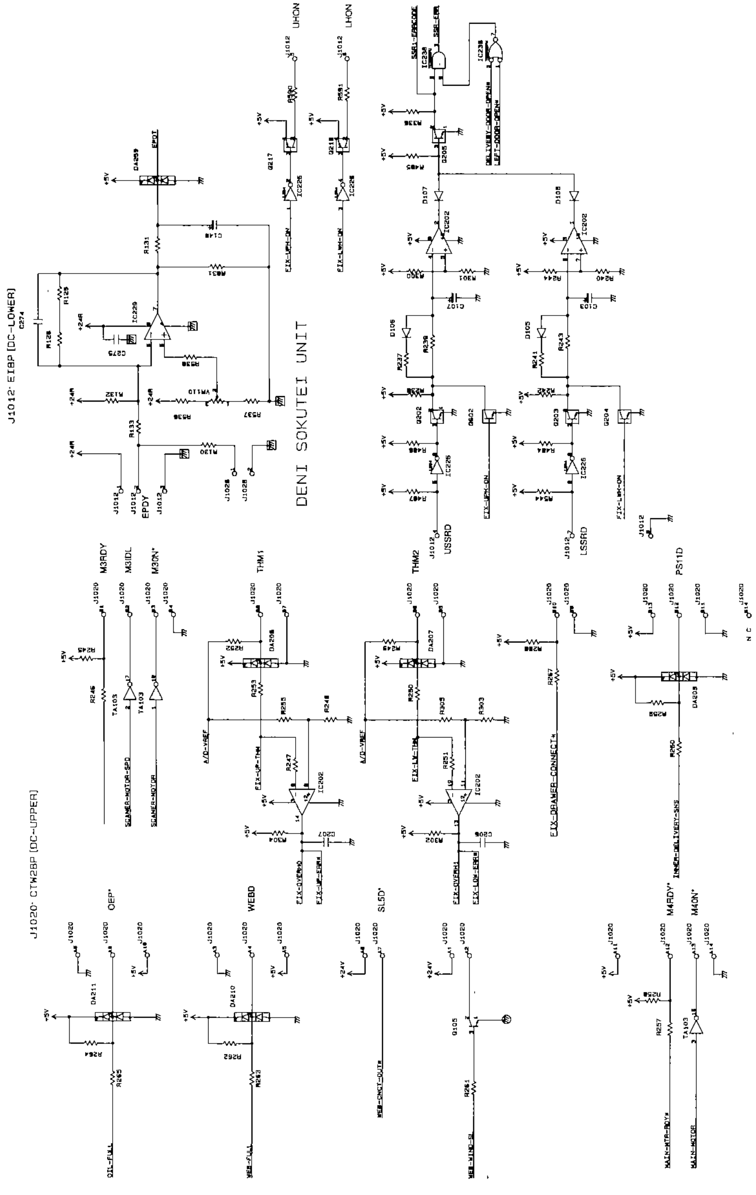
DC controller circuit diagram (CLC800) (10/22)


J1019 [HIF6-40DSA]
DC-CONTROLLER <---> LASER CONTROLLER INTERFACE
DBUS<15..0>
ABUS<23..0>
IC203
LS245
RA101
RA102
+5V
IC204
IC205
LS244
BETACS*
MRD*
MRDW*
MLWR*
LC-RESET
LC-ITOP-OUT
LC-HSYNC
IC209
R115
R116
R337
J1019

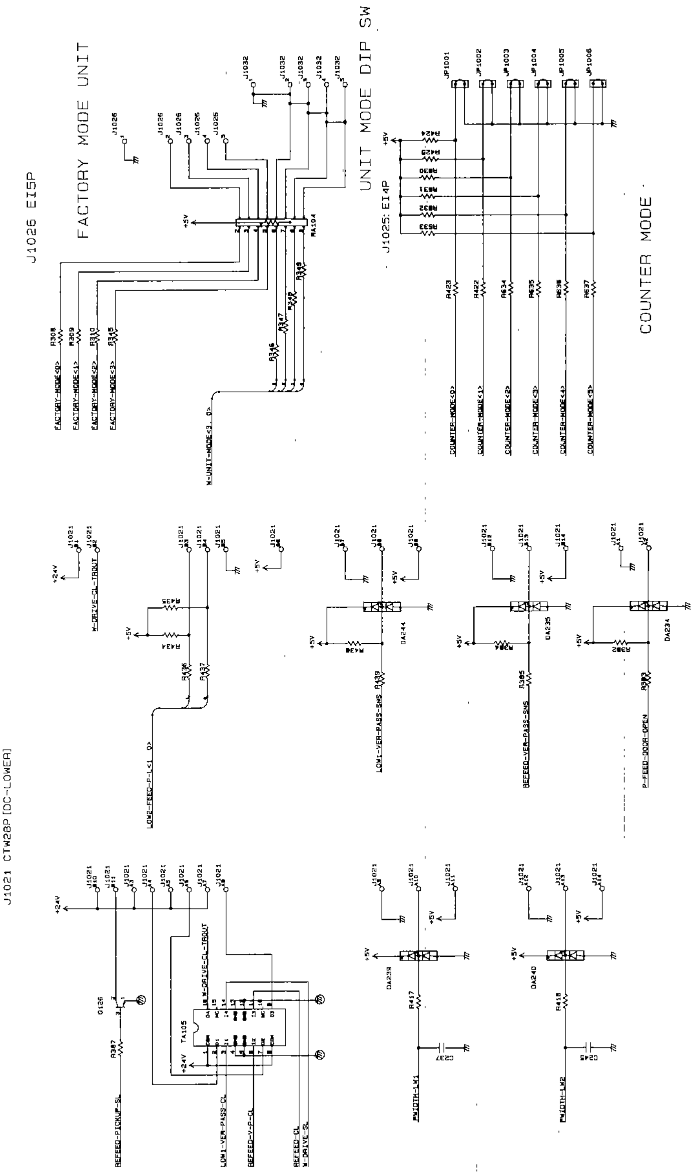
DC controller circuit diagram (CLC800) (11/22)


FAN HI/LW CIRCUIT
FM9D
FM3D
FMON
IP-FAN<1>
IP-FAN<2>
EXH-FAN<1>
EXH-FAN<2>
PCB-FAN1<1>
PCB-FAN1<2>
PCB-FAN2<1>
PCB-FAN2<2>
DCP1-FAN-ERR
SSR2-ON
SSR2-ON/OFF*
J1018 CTW24P [DC-UPPER]
DRUMHP
ITOP_B'
DCPRDY'
RCPOUT2'
DCPOUT2'
RP_RXD2'
RP_TXD2'
DRUM-HP
ITOP-B
DPRDY
READER-RV-IN<1>
READER-RV-OUT<1>
RXD2
TXD2
CONNECT TO READER CONTROLLER
RP_TXD1'
RP_RXD1'
DCPOUT1
RXPOUT1'
RCPRDY'
ITOP_A'
PS27D
TXD1
RXD1
READER-RV-OUT<0>
READER-RV-IN<0>
DPRDY
ITOP-A
OUTER-DELIVERY-SNS

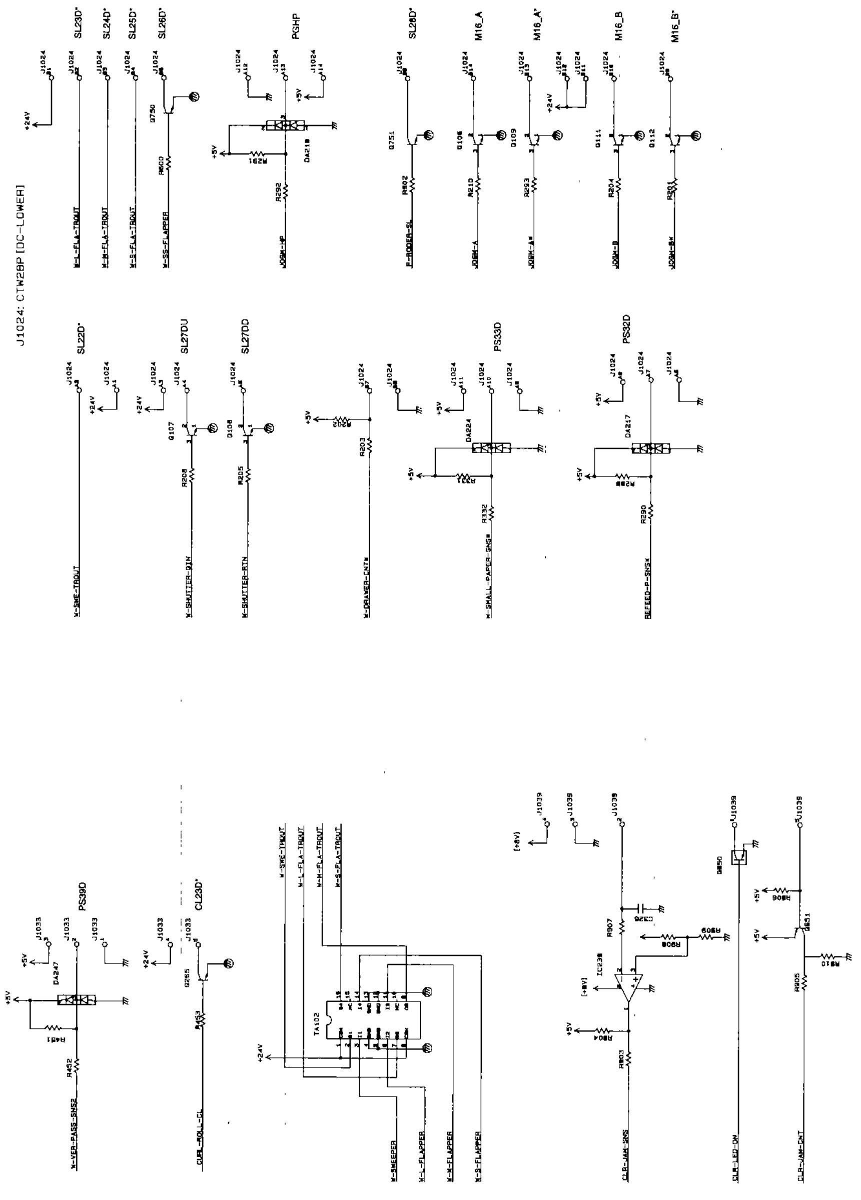
DC controller circuit diagram (CLC800) (12/22)


J1012' EI8P [DC-LOWER]
J1020' CTW28P [DC-UPPER]
DENI SOKUTEI UNIT
UHON
LHON
EPDT
EPDY
USSRD
LSSRD
THM1
THM2
M3RDY
M3IDL
M3ON*
PS11D
OEP*
WEBD
SL5D*
M4RDY*
M4ON*
FIX-UPH-ON
FIX-LWH-ON
SSR1-ERRCODE
SSR1-ERR
DELIVERY-DOOR-OPEN*
LEFT-DOOR-OPEN*
A/D-VREF
FIX-UP-THM
FIX-LW-THM
FIX-OVERH0
FIX-UP-ERR
FIX-OVERH1
FIX-LOW-ERR
FIX-DRAWER-CONNECT*
INNER-DELIVERY-SNS
SCANER-MOTOR-SPD
SCANER-MOTOR
OIL-FULL
WEB-FULL
WEB-CNCT-OUT
WEB-WIND-SL
MAIN-MTR-RDY
MAIN-MOTOR
IC226
IC229
IC202
IC238
TA103
Q217
Q218
Q205
Q202
Q203
Q602
Q204
Q105
D107
D108
D106
D105
DA259
DA206
DA207
DA208
DA210
DA211
+5V
+24V
N.C

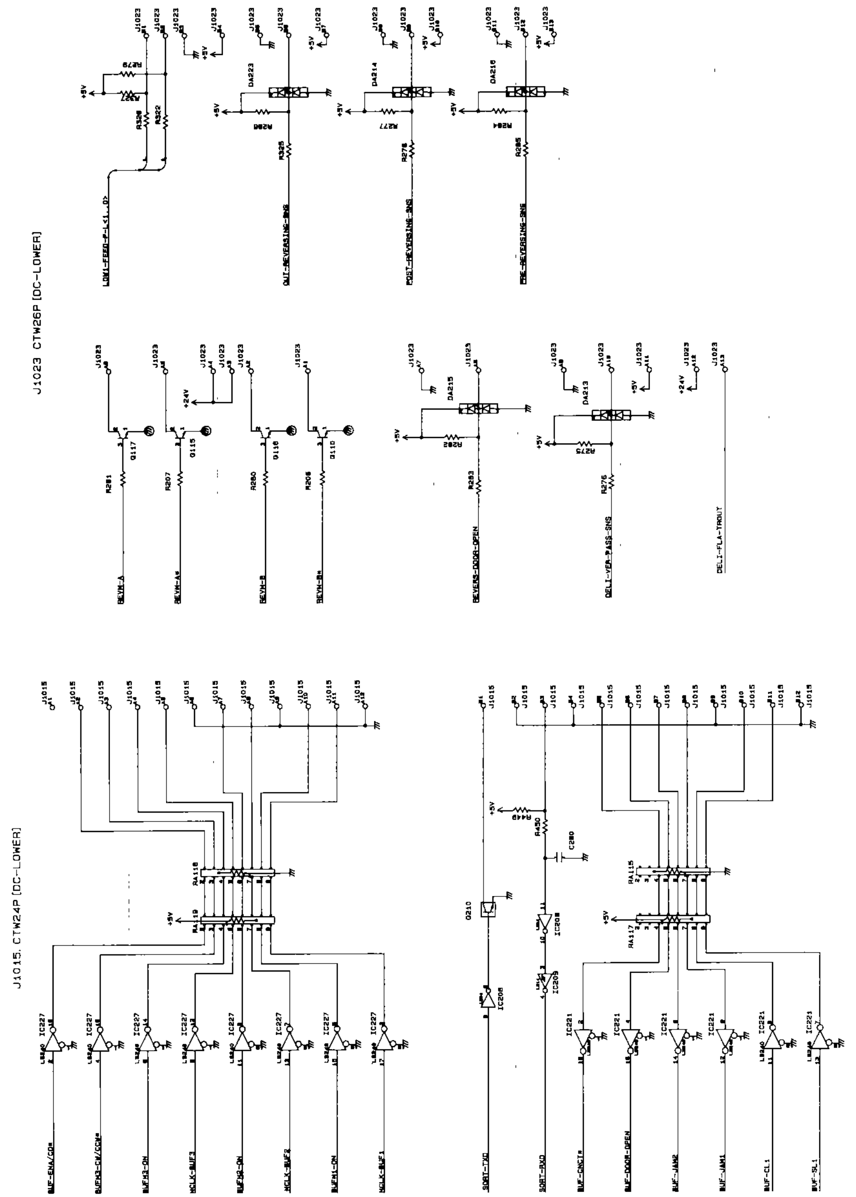
DC controller circuit diagram (CLC800) (13/22)


J1026 EI5P
FACTORY MODE UNIT
UNIT MODE DIP SW
J1025: EI4P
COUNTER MODE
J1021 CTW28P [DC-LOWER]
J1026
J1032
J1021
JP1001
JP1002
JP1003
JP1004
JP1005
JP1006
RA104
+5V
+24V
FACTORY-MODE<0>
FACTORY-MODE<1>
FACTORY-MODE<2>
FACTORY-MODE<3>
R308
R309
R310
R345
R346
R347
R348
R349
M-UNIT-MODE<3..0>
R423
R422
R634
R635
R636
R637
R424
R425
R630
R631
R632
R633
COUNTER-MODE<0>
COUNTER-MODE<1>
COUNTER-MODE<2>
COUNTER-MODE<3>
COUNTER-MODE<4>
COUNTER-MODE<5>
M-DRIVE-CL-TRQUT
R435
R434
R436
R437
LOW2-FEED-P-L<1..0>
DA244
R438
R439
LOW1-VER-PASS-SNS
DA235
R384
R385
BEFEED-VER-PASS-SNS
DA234
R382
R383
P-FEED-DOOR-OPEN
Q126
R387
BEFEED-PICKUP-SL
TA105
LOW1-VER-PASS-CL
BEFEED-V-P-CL
BEFEED-CL
M-DRIVE-SL
DA239
R417
C237
PWIDTH-LM1
DA240
R418
C243
PWIDTH-LM2

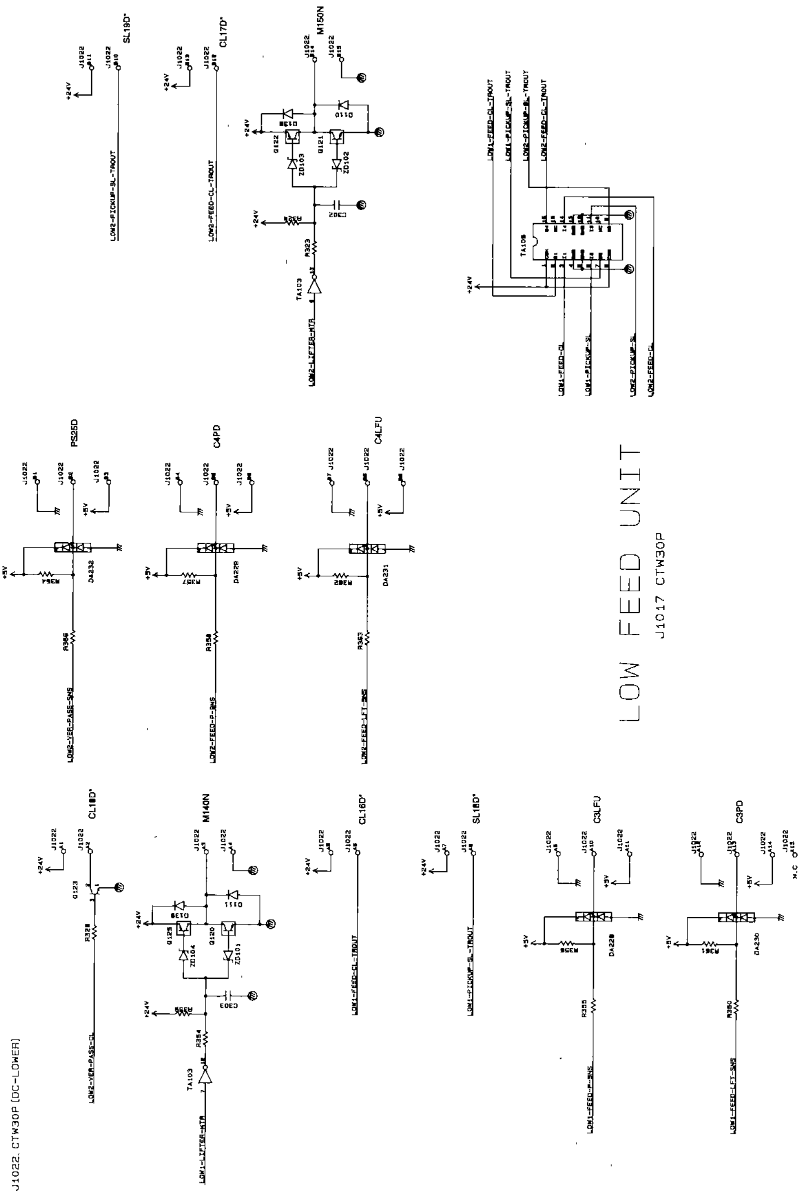
DC controller circuit diagram (CLC800) (14/22)


J1024: CTW28P [DC-LOWER]
J1024
SL23D*
SL24D*
SL25D*
SL26D*
PGHP
SL28D*
M16_A
M16_A*
M16_B
M16_B*
SL22D*
SL27DU
SL27DD
PS33D
PS32D
PS39D
CL23D*
J1033
J1039
+24V
+5V
Q750
R600
R292
R291
DA218
Q751
R602
Q106
R210
Q109
R293
Q111
R204
Q112
R201
Q107
R208
Q108
R205
R202
R203
DA224
R331
R332
DA217
R289
R290
DA247
R451
R452
Q265
R453
TA102
IC238
C326
R907
R908
R909
R904
R903
Q850
Q851
R906
R905
R910
W-L-FLA-TROUT
W-M-FLA-TROUT
W-S-FLA-TROUT
W-SS-FLAPPER
JOGM-HP
P-RODER-SL
JOGM-A
JOGM-A*
JOGM-B
JOGM-B*
W-SWE-TROUT
W-SHUTTER-OIN
W-SHUTTER-RTN
W-DRAWER-CNT*
W-SMALL-PAPER-SNS*
REFEED-P-SNS*
W-VER-PASS-SNS2
CURL-ROLL-CL
W-SWEEPER
W-L-FLAPPER
W-M-FLAPPER
W-S-FLAPPER
CLR-JAM-SNS
CLR-LED-ON
CLR-JAM-CNT

DC controller circuit diagram (CLC800) (15/22)

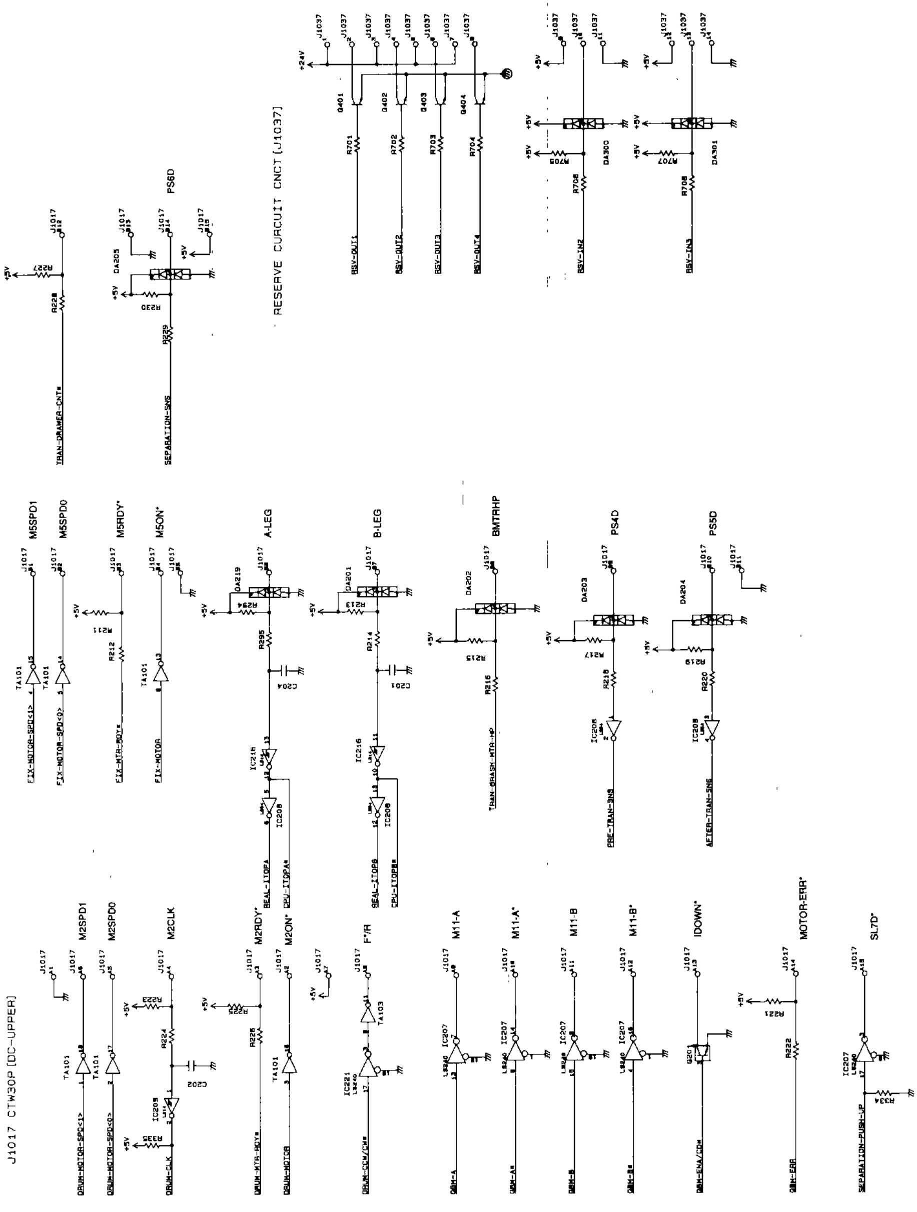

J1023 CTW26P [DC-LOWER]
J1015 CTW24P [DC-LOWER]
LDM1-FEED-P-L<1..0>
OUT-REVERSING-SNS
POST-REVERSING-SNS
PRE-REVERSING-SNS
REVM-A
REVM-A*
REVM-B
REVM-B*
REVERS-DOOR-OPEN
DELI-VER-PASS-SNS
DELI-FLA-TROUT
BUF-ENA/CD*
BUFM3-CW/CCW*
BUFM3-ON
MCLK-BUF3
BUFM2-ON
MCLK-BUF2
BUFM1-ON
MCLK-BUF1
SORT-TXD
SORT-RXD
BUF-CNCT*
BUF-DOOR-OPEN
BUF-JAM2
BUF-JAM1
BUF-CL1
BUF-SL1
DA223
DA214
DA216
DA215
DA213
Q117
Q115
Q116
Q110
Q210
IC227
IC221
IC208
IC209
RA118
RA119
RA115
RA117
C280
+5V
+24V

DC controller circuit diagram (CLC800) (16/22)

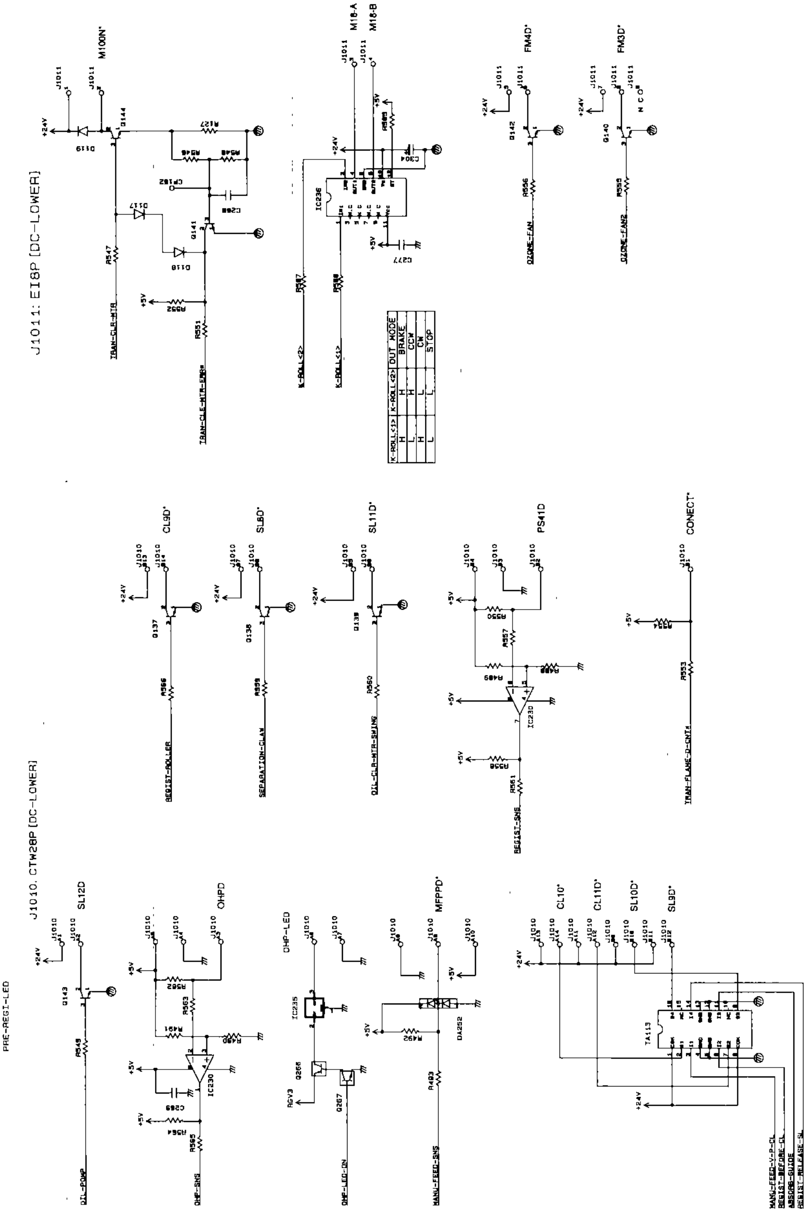


SL19D*
CL17D*
M150N
J1022
+24V
LOW2-PICKUP-SL-TROUT
LOW2-FEED-CL-TROUT
D138
D110
Q122
Q121
ZD103
ZD102
C302
R322
R323
TA103
LOW2-LIFTER-MTR
LOW1-FEED-CL-TROUT
LOW1-PICKUP-SL-TROUT
LOW2-PICKUP-SL-TROUT
LOW2-FEED-CL-TROUT
TA106
LOW1-FEED-CL
LOW1-PICKUP-SL
LOW2-PICKUP-SL
LOW2-FEED-CL
PS25D
C4PD
C4LFU
+5V
DA232
DA228
DA231
R364
R357
R362
R366
R358
R363
LOW2-VER-PASS-SNS
LOW2-FEED-P-SNS
LOW2-FEED-LFT-SNS
LOW FEED UNIT
J1017 CTW30P
CL18D*
M140N
CL16D*
SL18D*
C3LFU
C3PD
Q123
R328
D139
D111
Q125
Q120
ZD104
ZD101
C303
R354
LOW2-VER-PASS-CL
LOW1-LIFTER-MTR
LOW1-FEED-CL-TROUT
LOW1-PICKUP-SL-TROUT
DA229
DA230
R355
R360
LOW1-FEED-P-SNS
LOW1-FEED-LFT-SNS
N.C
J1022, CTW30P [DC-LOWER]

DC controller circuit diagram (CLC800) (17/22)

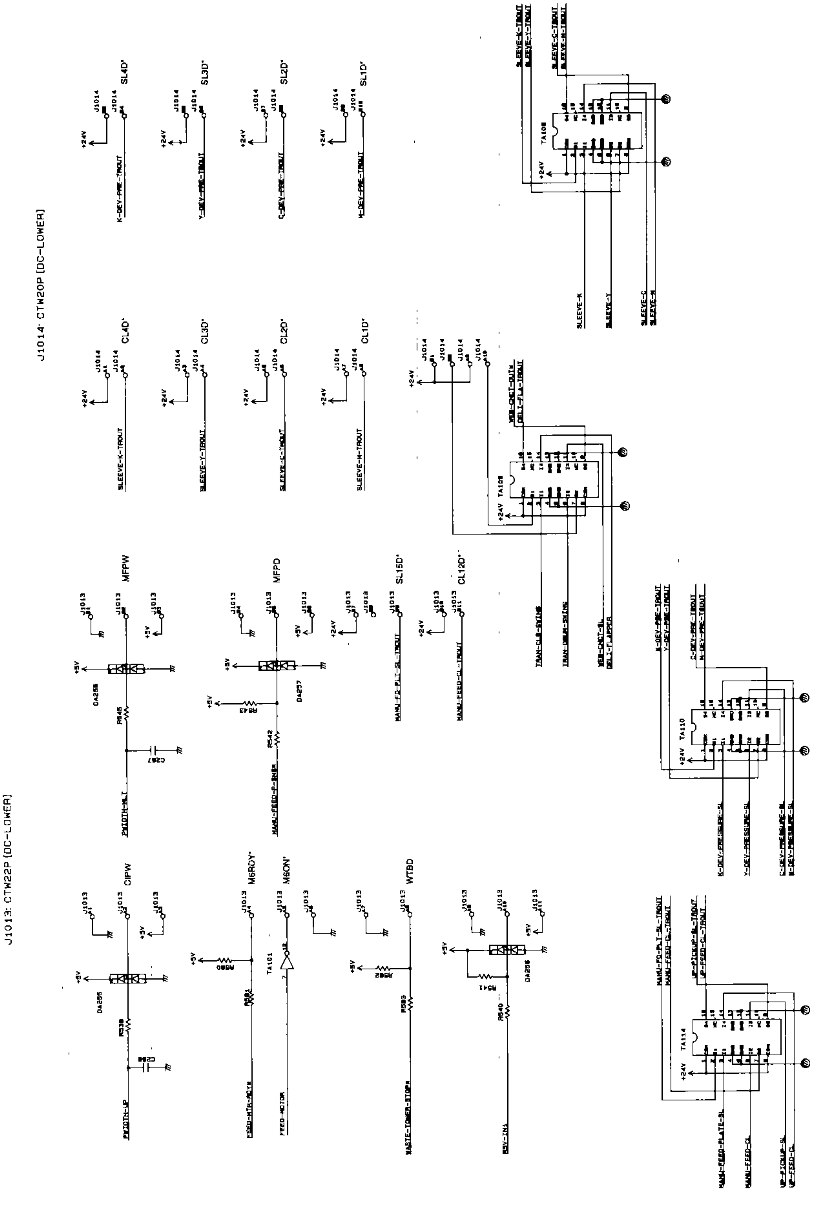

J1017 CTW30P [DC-UPPER]
RESERVE CURCUIT CNCT [J1037]
+24V
+5V
J1017
J1037
Q401
Q402
Q403
Q404
R701
R702
R703
R704
DA300
DA301
RSV-OUT1
RSV-OUT2
RSV-OUT3
RSV-OUT4
RSV-IN2
RSV-IN3
PS6D
DA205
R227
R228
R229
R230
TRAN-DRAWER-CNT*
SEPARATION-SNS
M5SPD1
M5SPD0
M5RDY*
M5ON*
A-LEG
B-LEG
BMTRHP
PS4D
PS5D
TA101
FIX-MOTOR-SPD<1>
FIX-MOTOR-SPD<0>
FIX-MTR-RDY*
FIX-MOTOR
DA219
DA201
DA202
DA203
DA204
C204
C201
IC216
IC208
REAL-ITOPA
CPU-ITOPA*
REAL-ITOPB
CPU-ITOPB*
TRAN-BRASH-MTR-HP
PRE-TRAN-SNS
AFTER-TRAN-SNS
M2SPD1
M2SPD0
M2CLK
M2RDY*
M2ON*
F*/R
M11-A
M11-A*
M11-B
M11-B*
IDOWN*
MOTOR-ERR*
SL7D*
C202
IC205
TA103
IC221
IC207
Q201
DRUM-MOTOR-SPD<1>
DRUM-MOTOR-SPD<0>
DRUM-CLK
DRUM-MTR-RDY*
DRUM-MOTOR
DRUM-CCW/CW*
DBM-A
DBM-A*
DBM-B
DBM-B*
DBM-ENA/CD*
DBM-ERR
SEPARATION-PUSH-UP

DC controller circuit diagram (CLC800) (18/22)

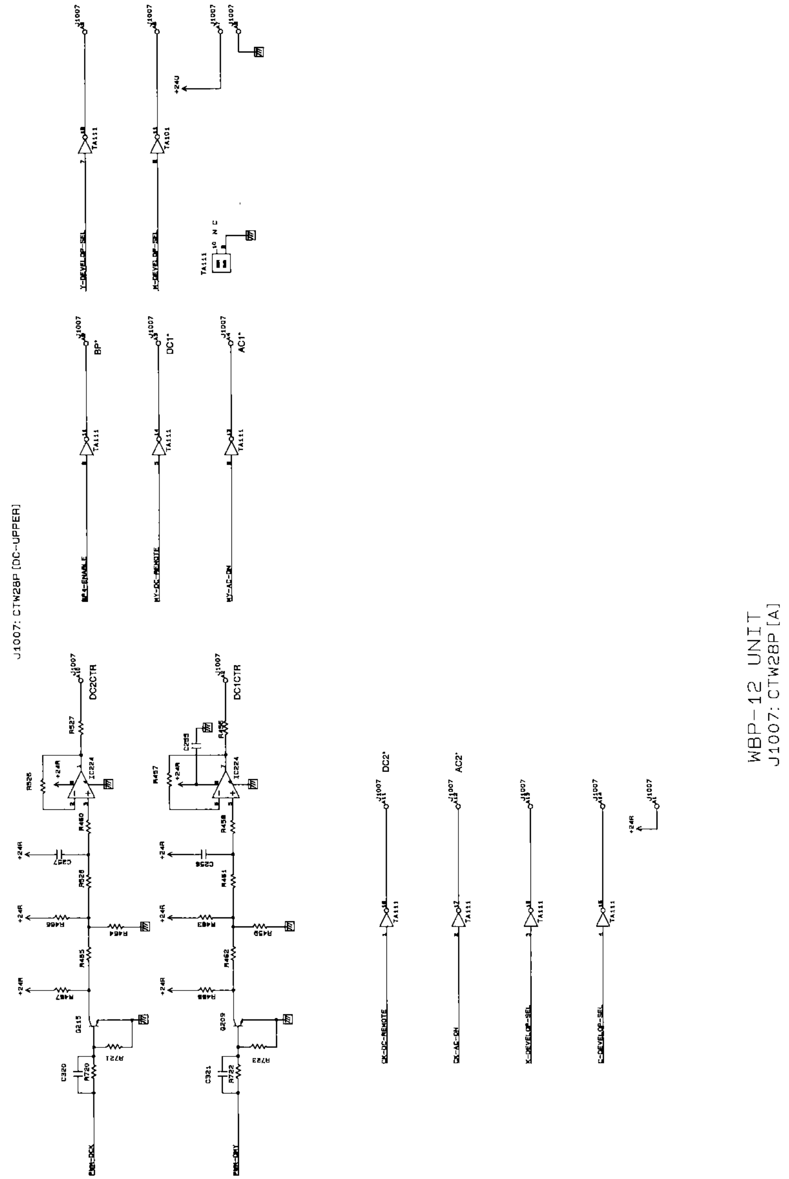

J1011: EI8P [DC-LOWER]
J1011
M100N*
+24V
D119
Q144
R127
R546
R548
CP182
C268
D117
D118
Q141
R547
+5V
R552
R551
TRAN-CLR-MTR
TRAN-CLR-MTR-ENB*
M18-A
M18-B
IC236
C304
C277
K-ROLL<2>
K-ROLL<1>
FM4D*
FM3D*
Q142
Q140
R556
R555
OZONE-FAN
OZONE-FAN2
NC
J1010. CTW28P [DC-LOWER]
J1010
CL9D*
SL60*
SL11D*
PS41D
CONECT*
Q137
Q138
Q139
R550
R557
R489
R488
IC230
R538
R561
R553
REGIST-ROLLER
SEPARATION-CLAW
OIL-CLR-MTR-SWING
REGIST-SNS
TRAN-FLAME-D-CNT*
PRE-REGI-LED
SL12D
OHPD
OHP-LED
MFPPD*
CL10*
CL11D*
SL10D*
SL9D*
Q143
R549
R562
R563
R491
R490
C265
R564
R565
IC235
Q266
Q267
RGV3
R492
R493
DA252
TA113
OIL-PUMP
OHP-SNS
OHP-LED-ON
MANU-FEED-SNS
MANU-FEED-V-P-CL
REGIST-BEFORE-CL
ABSORB-GUIDE
REGIST-RELEASE-SL

K-ROLL<1>	K-ROLL<2>	OUT MODE
H	H	BRAKE
L	H	CCW
H	L	CW
L	L	STOP

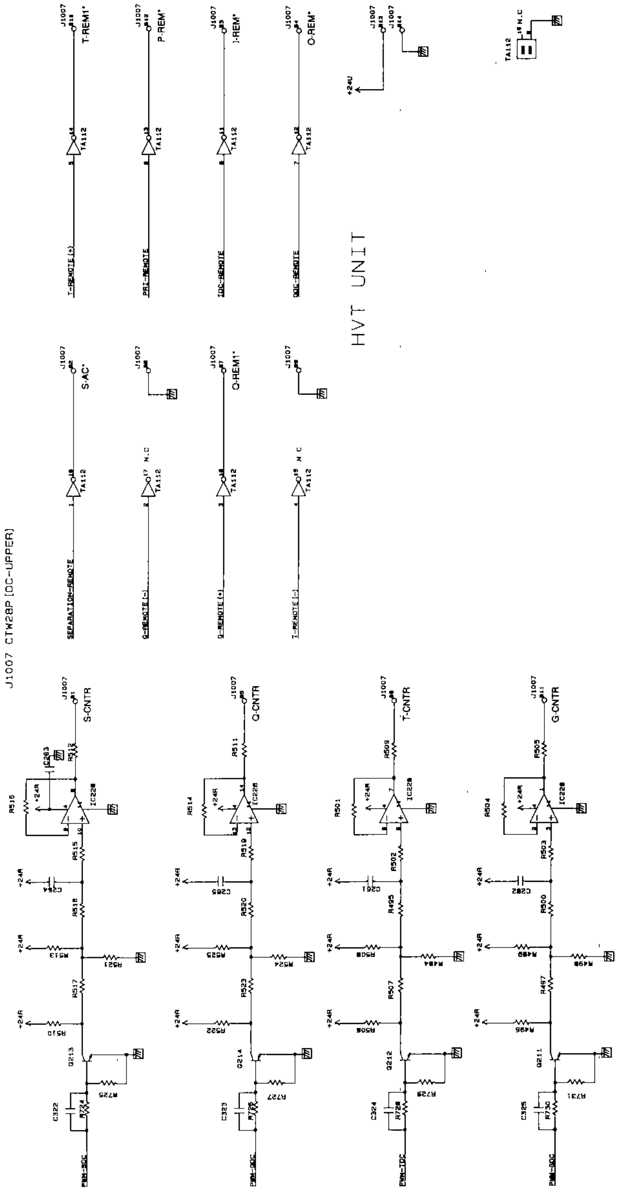
DC controller circuit diagram (CLC800) (19/22)


J1014: CTW20P [DC-LOWER]
J1013: CTW22P [DC-LOWER]
SL4D'
SL3D'
SL2D'
SL1D'
CL4D'
CL3D'
CL2D'
CL1D'
MFPW
MFPD
SL15D'
CL12D'
CIPW
M6RDY'
M6ON'
WTBD
J1014
J1013
+24V
+5V
K-DEV-PRE-TROUT
Y-DEV-PRE-TROUT
C-DEV-PRE-TROUT
M-DEV-PRE-TROUT
SLEEVE-K-TROUT
SLEEVE-Y-TROUT
SLEEVE-C-TROUT
SLEEVE-M-TROUT
SLEEVE-K
SLEEVE-Y
SLEEVE-C
SLEEVE-M
TA108
TA109
TA110
TA114
TA101
WEB-CNCT-OUT*
DELI-FLA-TROUT
TRAN-CLN-SWING
TRAN-DRUM-SWING
WEB-CNCT-SL
DELI-FLAPPER
K-DEV-PRESSURE-SL
Y-DEV-PRESSURE-SL
C-DEV-PRESSURE-SL
M-DEV-PRESSURE-SL
MANU-FD-PLT-SL-TROUT
MANU-FEED-CL-TROUT
UP-PICKUP-SL-TROUT
UP-FEED-CL-TROUT
MANU-FEED-PLATE-SL
MANU-FEED-CL
UP-PICKUP-SL
UP-FEED-CL
DA255
DA256
DA257
DA258
R538
R540
R541
R542
R543
R545
R580
R581
R582
R583
C287
C288
PWIDTH-MLT
MANU-FEED-P-SNS*
PWIDTH-UP
FEED-MTR-RDY*
FEED-MOTOR
WASTE-TONER-STOP*
RSV-IN1

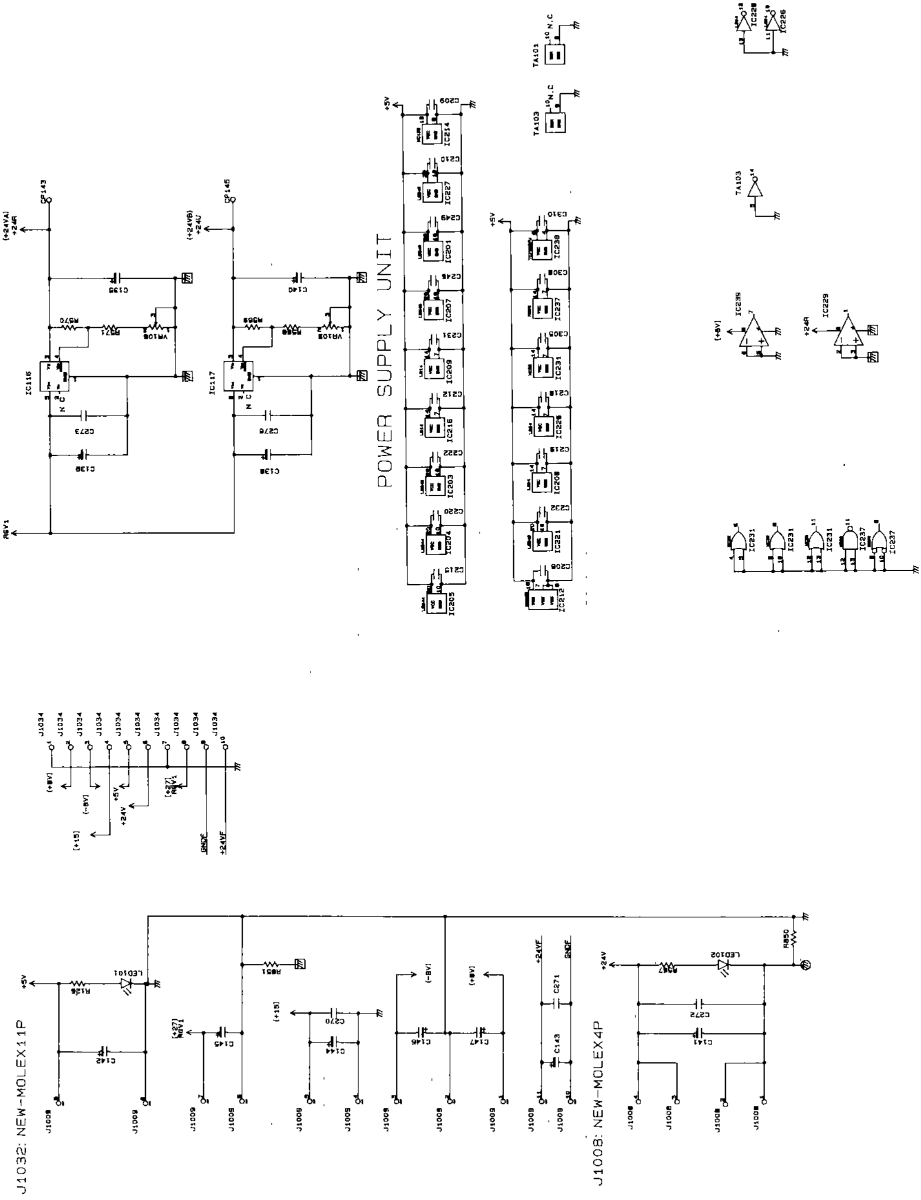
DC controller circuit diagram (CLC800) (20/22)


J1007
+24V
TA111
TA101
Y-DEVELOP-SEL
M-DEVELOP-SEL
TA111
N C
BP*
DC1*
AC1*
BP4-ENABLE
MY-DC-REMOTE
MY-AC-ON
J1007: CTW28P [DC-UPPER]
DC2CTR
DC1CTR
R527
R526
+24R
IC224
R480
C257
R528
R466
R464
R465
R467
Q215
R721
C320
R720
EVR-DCK
R457
C255
R456
R458
C256
R461
R463
R459
R462
R468
Q209
R723
C321
R722
EVR-DMY
DC2*
AC2*
CK-DC-REMOTE
CK-AC-ON
K-DEVELOP-SEL
C-DEVELOP-SEL
WBP-12 UNIT
J1007: CTW28P [A]

DC controller circuit diagram (CLC800) (21/22)

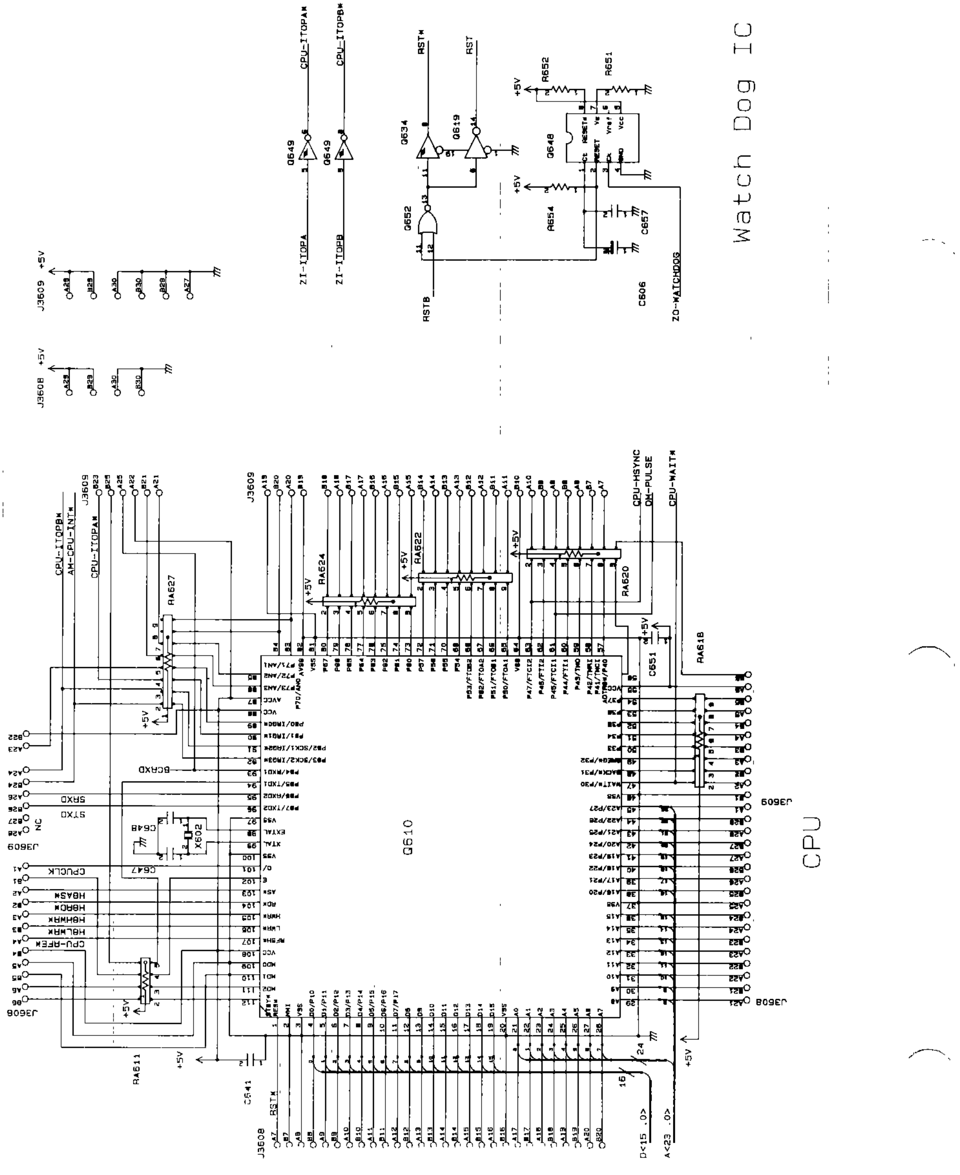

J1007 CTW28P [DC-UPPER]
HVT UNIT
J1007
T-REM1*
P-REM*
I-REM*
O-REM*
+24U
N.C
TA112
T-REMOTE(+)
PRI-REMOTE
IDC-REMOTE
ODC-REMOTE
S-AC*
O-REM1*
SEPARATION-REMOTE
O-REMOTE(-)
O-REMOTE(+)
T-REMOTE(-)
S-CNTR
O-CNTR
T-CNTR
G-CNTR
IC228
+24R
Q213
Q214
Q212
Q211
C322
C323
C324
C325
C284
C285
C281
C282
C283
R512
R511
R509
R505
R516
R514
R501
R504
R515
R519
R502
R503
R518
R520
R495
R500
R513
R525
R508
R489
R521
R524
R494
R498
R517
R523
R507
R497
R510
R522
R506
R496
R725
R727
R729
R731
R724
R726
R728
R730
PWM-ODC
PWM-IDC

DC controller circuit diagram (CLC800) (22/22)

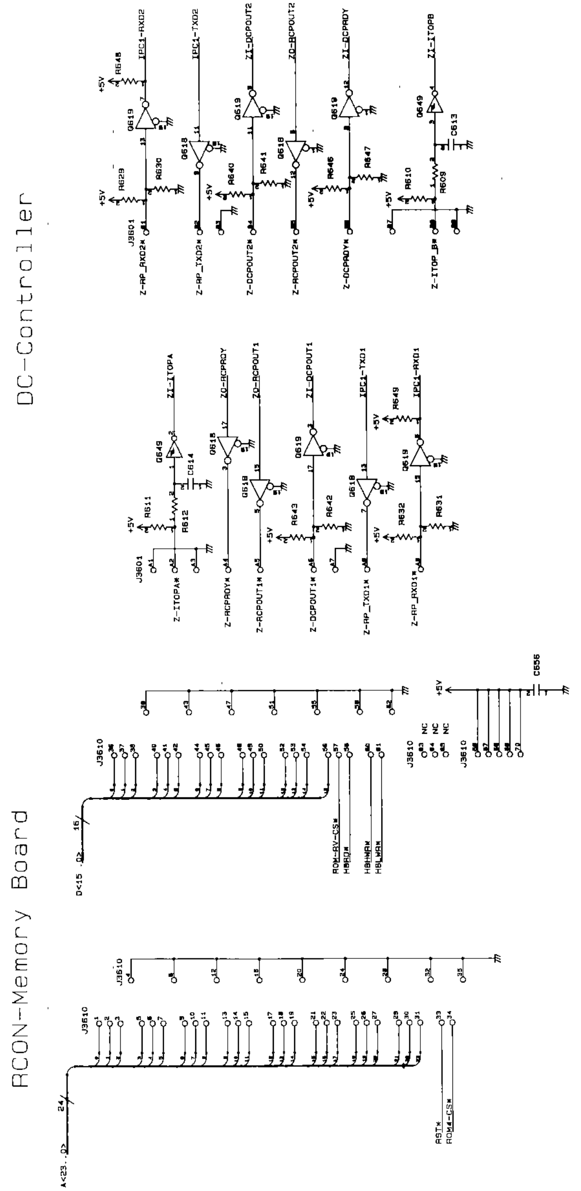

POWER SUPPLY UNIT
J1032: NEW-MOLEX11P
J1008: NEW-MOLEX4P
IC116
IC117
CP143
CP145
VR108
VR109
C139
C140
C273
C276
C138
REV1
+5V
+24V
+24VF
GNDF
TA101
TA103
N.C
IC214
IC227
IC201
IC207
IC209
IC216
IC203
IC204
IC205
IC238
IC237
IC231
IC226
IC206
IC221
IC212
IC228
IC239
IC229
J1034
LED101
LED102
R126
R651
R650
C142
C145
C270
C144
C146
C147
C271
C143
C272
C141
J1009
J1008

E. READER CONTROLLER CIRCUIT DIAGRAM

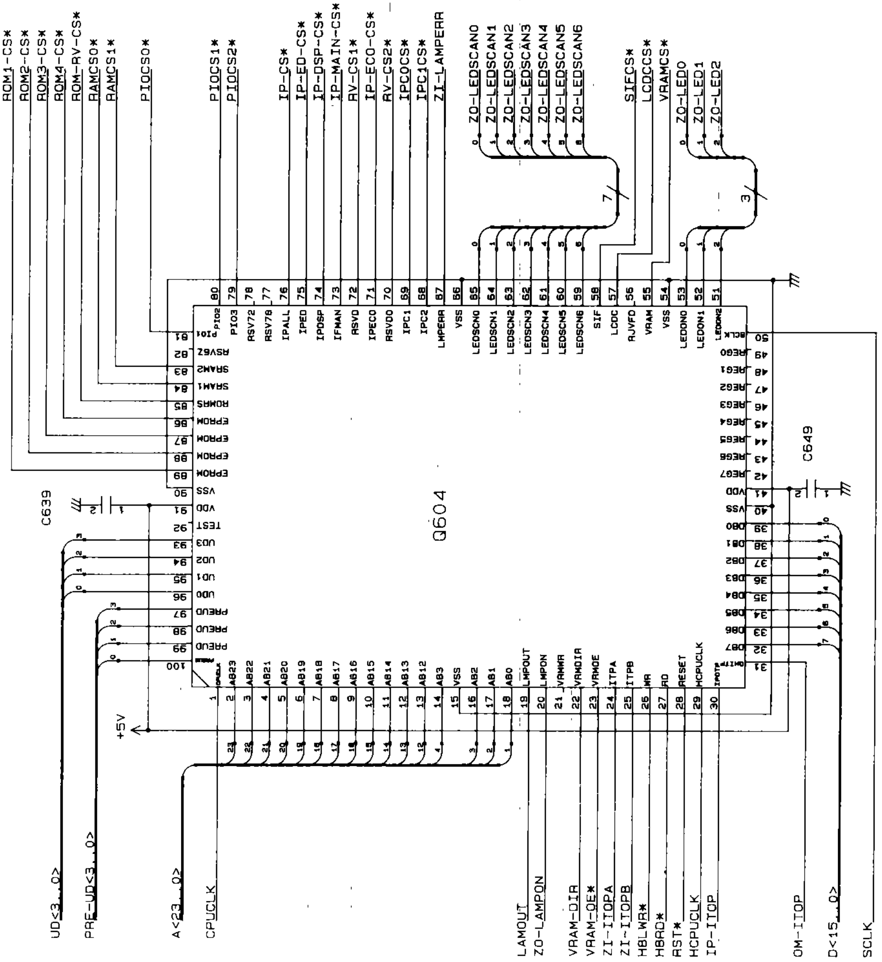
Reader controller circuit diagram (1/13)


Watch Dog IC
CPU
Q610
Q648
Q634
Q619
Q652
Q649
R652
R651
R654
C657
C606
RA627
RA624
RA622
RA620
RA618
RA611
C641
C651
C647
C648
X602
J3608
J3609
+5V
CPU-ITOPA*
CPU-ITOPB*
RST*
RST
RSTB
ZI-ITOPA
ZI-ITOPB
ZO-WATCHDOG
CPU-HSYNC
OM-PULSE
CPU-WAIT*
AM-CPU-INT*
BCRXD
SRXD
STXD
NC
CPUCLK
H8AS*
H8RD*
H8HWR*
H8LWR*
CPU-RFSH*
D<15..0>
A<23..0>
16
24

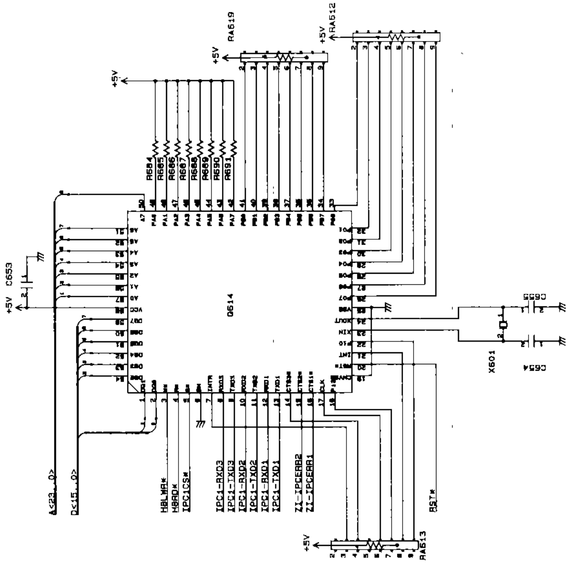
Reader controller circuit diagram (2/13)

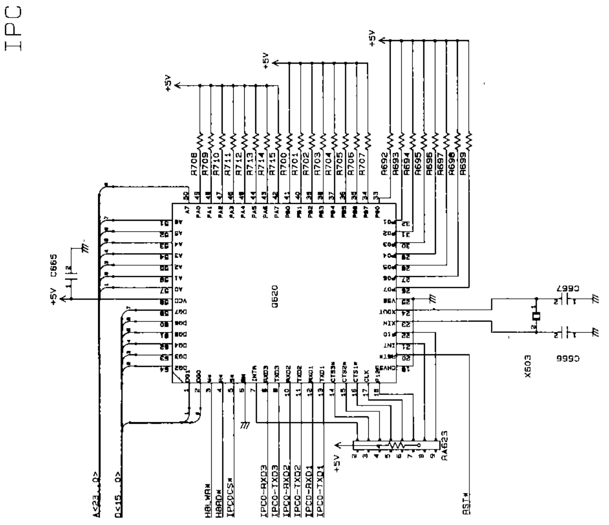

DC-Controller
RCON-Memory Board
J3601
J3610
IPC1-RXD2
IPC1-TXD2
ZI-DCPOUT2
ZO-RCPOUT2
ZI-DCPRDY
ZI-ITOPB
Z-RP_RXD2*
Z-RP_TXD2*
Z-DCPOUT2*
Z-RCPOUT2*
Z-DCPRDY*
Z-ITOP_B*
ZI-ITOPA
ZO-RCPRDY
ZO-RCPOUT1
ZI-DCPOUT1
IPC1-TXD1
IPC1-RXD1
Z-ITOPA*
Z-RCPRDY*
Z-RCPOUT1*
Z-DCPOUT1*
Z-RP_TXD1*
Z-RP_RXD1*
Q618
Q619
Q649
R609
R610
R611
R612
R629
R630
R631
R632
R640
R641
R642
R643
R645
R646
R647
R649
C613
C614
C656
+5V
NC
D<15..0>
16
A<23..0>
24
ROM-RV-CS*
HBRD*
HBHWR*
HBLWR*
RST*
ROM4-CS*

Reader controller circuit diagram (3/13)

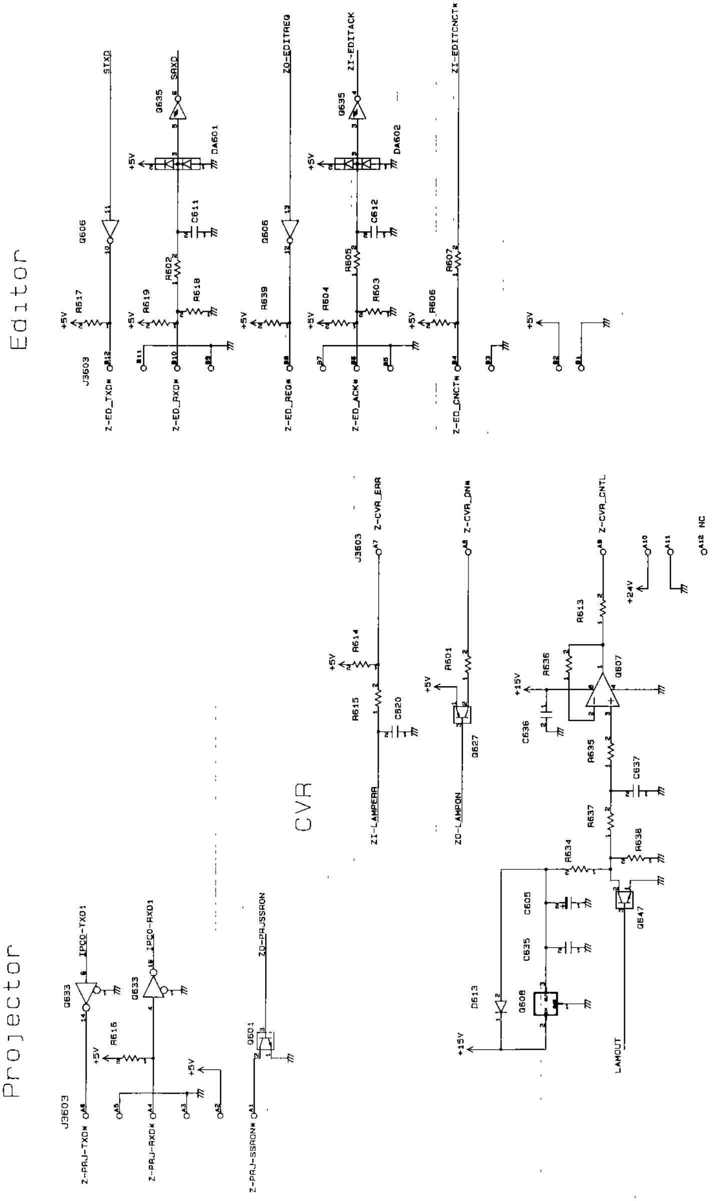

ROM1-CS*
ROM2-CS*
ROM3-CS*
ROM4-CS*
ROM-RV-CS*
RAMCS0*
RAMCS1*
PIOCS0*
PIOCS1*
PIOCS2*
IP-CS*
IP-ED-CS*
IP-DSP-CS*
IP-MAIN-CS*
RV-CS1*
IP-ECO-CS*
RV-CS2*
IPC0CS*
IPC1CS*
ZI-LAMPERR
ZO-LEDSCAN0
ZO-LEDSCAN1
ZO-LEDSCAN2
ZO-LEDSCAN3
ZO-LEDSCAN4
ZO-LEDSCAN5
ZO-LEDSCAN6
SIFCS*
LCDCCS*
VRAMCS*
ZO-LED0
ZO-LED1
ZO-LED2
7
3
Q604
C639
C649
+5V
UD<3..0>
PRE-UD<3..0>
A<23..0>
CPUCLK
LAMOUT
ZO-LAMPON
VRAM-DIR
VRAM-OE*
ZI-ITOPA
ZI-ITOPB
HBLWR*
HBRD*
RST*
HCPUCLK
IP-ITOP
OM-ITOP
D<15..0>
SCLK

Reader controller circuit diagram (4/13)

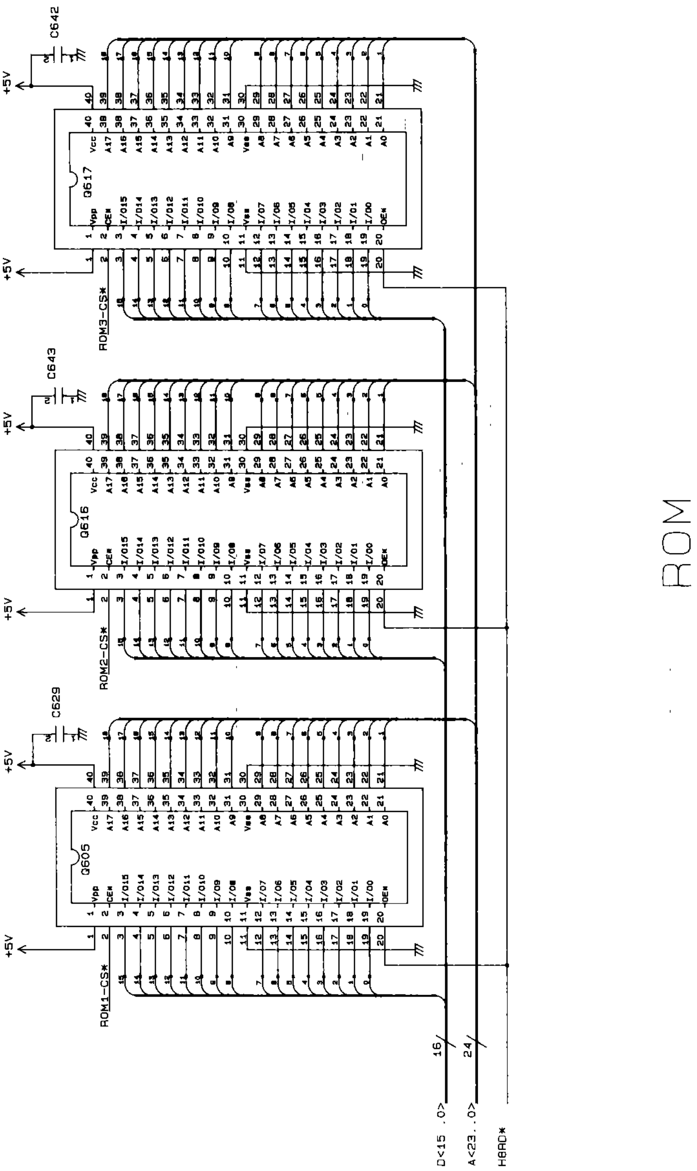

+5V
RA619
RA612
R684
R685
R686
R687
R688
R689
R690
R691
C653
Q614
C655
C654
X601
A<23..0>
D<15..0>
HBLWR*
HBRD*
IPC1CS*
IPC1-RXD3
IPC1-TXD3
IPC1-RXD2
IPC1-TXD2
IPC1-RXD1
IPC1-TXD1
ZI-IPCERR2
ZI-IPCERR1
RST*
RA613


IPC
+5V
R708
R709
R710
R711
R712
R713
R714
R715
R700
R701
R702
R703
R704
R705
R706
R707
R692
R693
R694
R695
R696
R697
R698
R699
C665
Q620
C667
C666
X603
A<23..0>
D<15..0>
HBLWR*
HBRD*
IPC0CS*
IPC0-RXD3
IPC0-TXD3
IPC0-RXD2
IPC0-TXD2
IPC0-RXD1
IPC0-TXD1
RST*
RA623

Reader controller circuit diagram (5/13)

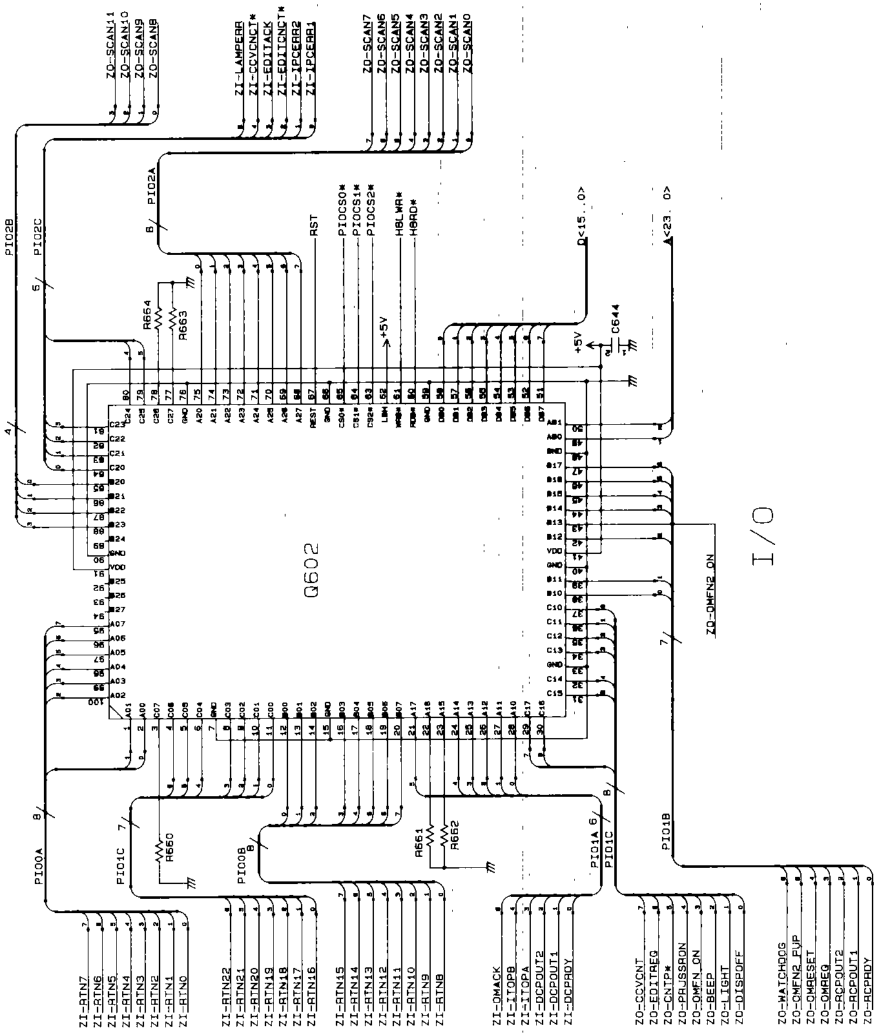

Editor
J3603
Z-ED_TXD*
Z-ED_RXD*
Z-ED_REQ*
Z-ED_ACK*
Z-ED_CNCT*
B12
B11
B10
B9
B8
B7
B6
B5
B4
B3
B2
B1
+5V
R617
R619
R618
R602
R639
R604
R603
R605
R606
R607
C611
C612
Q606
Q635
DA601
DA602
STXD
SRXD
ZO-EDITREQ
ZI-EDITACK
ZI-EDITCNCT*
CVR
Z-CVR_ERR
Z-CVR_ON*
Z-CVR_CNTL
A7
A8
A9
A10
A11
A12 NC
+24V
R613
R614
R615
C620
R601
Q627
ZI-LAMPERR
ZO-LAMPON
+15V
R636
Q607
C636
R635
C637
R637
R638
R634
Q647
C605
C635
D613
Q608
LAMOUT
Projector
Z-PRJ-TXD*
Z-PRJ-RXD*
Z-PRJ-SSRON*
A6
A5
A4
A3
A2
A1
Q633
R616
IPC0-TXD1
IPC0-RXD1
ZO-PRJSSRON
Q601

Reader controller circuit diagram (6/13)

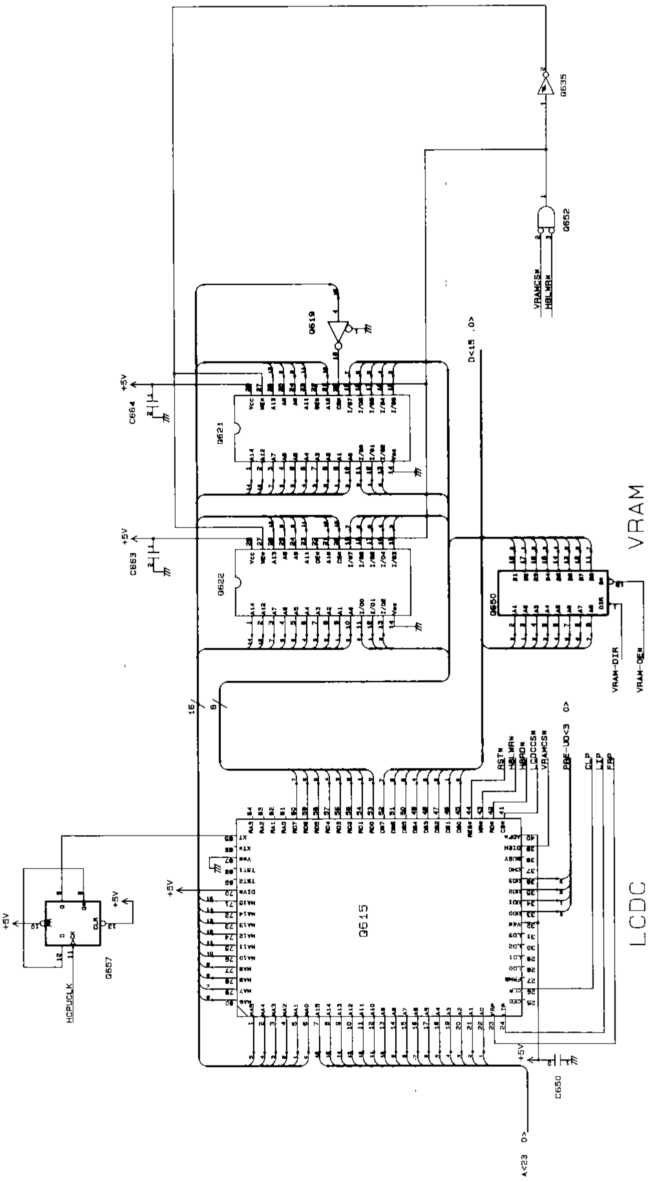

C642
C643
C629
+5V
Q617
Q616
Q605
ROM3-CS*
ROM2-CS*
ROM1-CS*
Vcc
Vpp
OE*
CE*
Vss
A0
A17
I/O0
I/O15
16
24
D<15 .0>
A<23 . .0>
HBRD*
ROM

CANON COLOR LASER COPIER 700/800 REV.2 NOV. 1996 PRINTED IN JAPAN (IMPRIME AU JAPON)

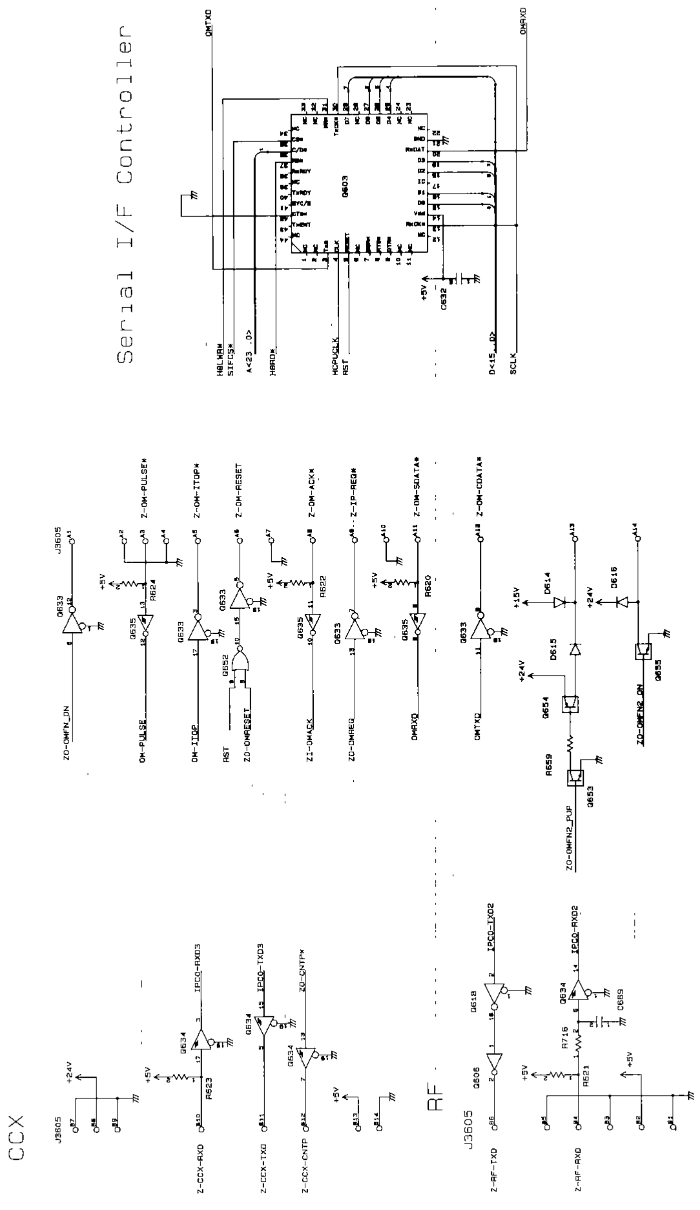
Reader controller circuit diagram (7/13)


ZO-SCAN11
ZO-SCAN10
ZO-SCAN9
ZO-SCAN8
ZI-LAMPERR
ZI-CCVCNCT*
ZI-EDITACK
ZI-EDITCNCT*
ZI-IPCERR2
ZI-IPCERR1
ZO-SCAN7
ZO-SCAN6
ZO-SCAN5
ZO-SCAN4
ZO-SCAN3
ZO-SCAN2
ZO-SCAN1
ZO-SCAN0
PIO2B
PIO2C
PIO2A
RST
PIOCS0*
PIOCS1*
PIOCS2*
HBLWR*
HBRD*
D<15..0>
A<23..0>
R664
R663
+5V
C644
Q602
I/O
ZO-OMFN2_ON
PIO0A
PIO1C
R660
PIO0B
R661
R662
PIO1A
PIO1C
PIO1B
ZI-RTN7
ZI-RTN6
ZI-RTN5
ZI-RTN4
ZI-RTN3
ZI-RTN2
ZI-RTN1
ZI-RTN0
ZI-RTN22
ZI-RTN21
ZI-RTN20
ZI-RTN19
ZI-RTN18
ZI-RTN17
ZI-RTN16
ZI-RTN15
ZI-RTN14
ZI-RTN13
ZI-RTN12
ZI-RTN11
ZI-RTN10
ZI-RTN9
ZI-RTN8
ZI-OMACK
ZI-ITOPB
ZI-ITOPA
ZI-DCPOUT2
ZI-DCPOUT1
ZI-DCPRDY
ZO-CCVCNT
ZO-EDITREQ
ZO-CNTP*
ZO-PRJSSRON
ZO-OMFN_ON
ZO-BEEP
ZO-LIGHT
ZO-DISPOFF
ZO-WATCHDOG
ZO-OMFN2_PUP
ZO-OMRESET
ZO-OMREQ
ZO-RCPOUT2
ZO-RCPOUT1
ZO-RCPRDY

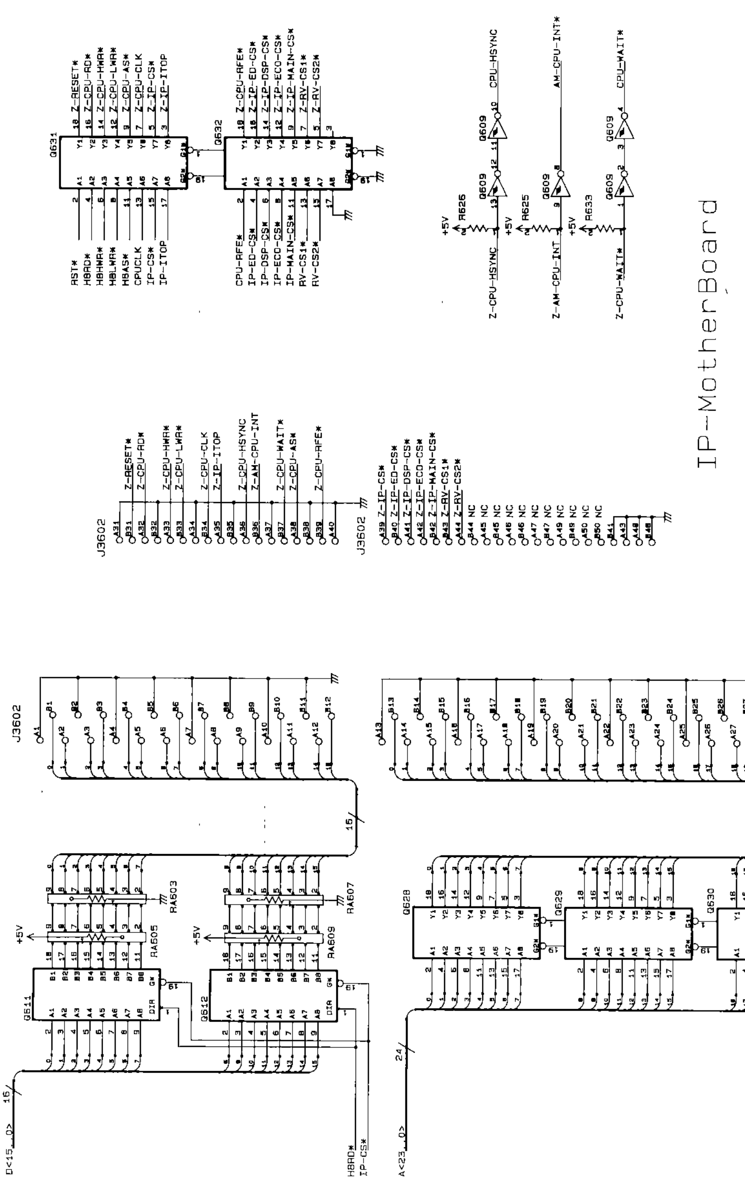
Reader controller circuit diagram (8/13)


Q635
Q652
VRAMCS*
HBLWR*
Q619
D<15 .0>
+5V
C664
Q621
+5V
C663
Q622
Q650
VRAM
VRAM-DIR
VRAM-OE*
16
8
RST*
HBLWR*
HBRD*
LCDCCS*
VRAMCS*
PDE-UD<3 0>
CLP
LXP
FRP
Q615
LCDC
+5V
Q657
HCPUCLK
+5V
C650
A<23 0>

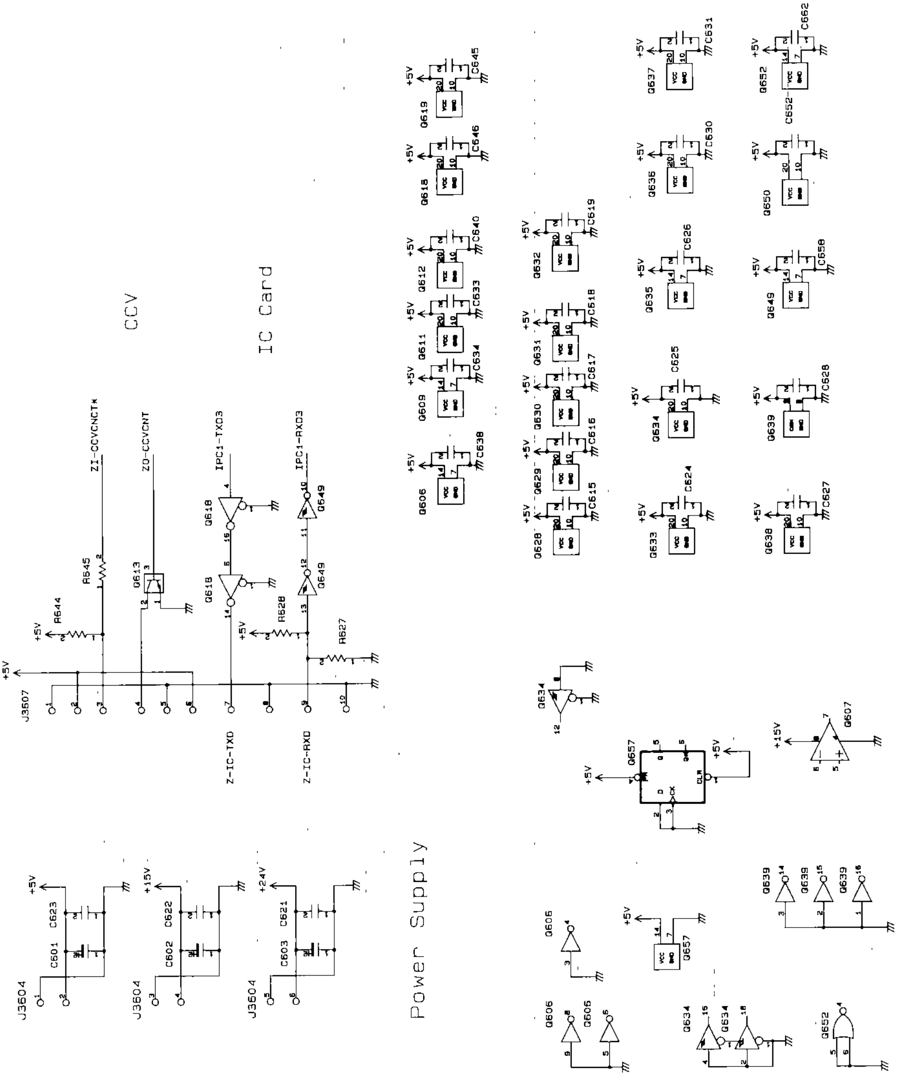
Reader controller circuit diagram (9/13)


Serial I/F Controller
Q603
OMTXD
OMRXD
HBLWRN
SIFCS*
A<23..0>
HBRD*
MCPUCLK
RST
D<15..0>
SCLK
+5V
C632
J3605
Q633
Q635
Q652
Q653
Q654
Q655
R620
R622
R624
R659
D614
D615
D616
+15V
+24V
ZO-OMFN_ON
OM-PULSE
OM-ITOP
ZO-OMRESET
ZI-OMACK
ZO-OMREQ
OMRXD
OMTXD
ZO-OMFN2_ON
ZO-OMFN2_PUP
Z-OM-PULSE*
Z-OM-ITOP*
Z-OM-RESET
Z-OM-ACK*
Z-IP-REQ*
Z-OM-SDATA*
Z-OM-CDATA*
CCX
Q634
R623
IPCO-RXD3
IPCO-TXD3
ZO-CNTP*
Z-CCX-RXD
Z-CCX-TXD
Z-CCX-CNTP
RF
Q618
Q606
R716
R621
C669
IPCO-TXD2
IPCO-RXD2
Z-RF-TXD
Z-RF-RXD

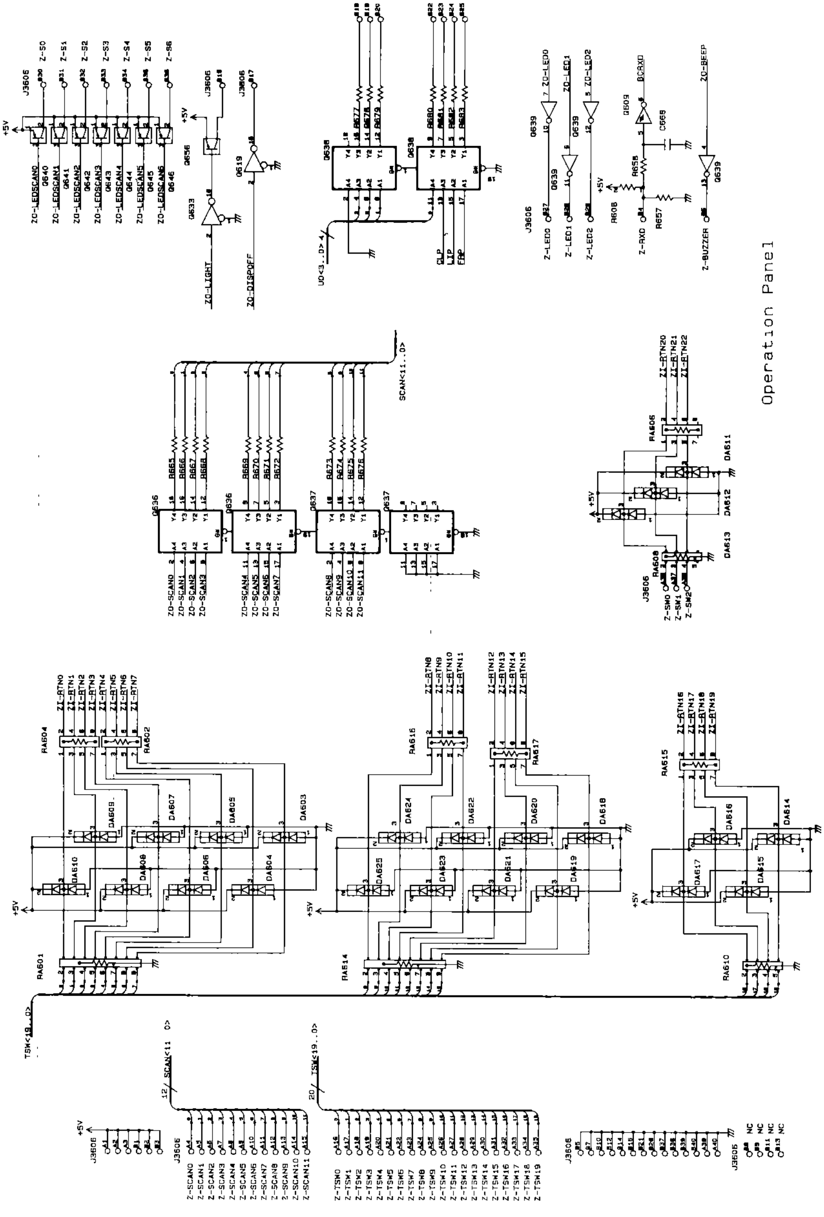
Reader controller circuit diagram (10/13)


IP-MotherBoard
Q631
Q632
Q609
R626
R625
R633
+5V
J3602
Q511
Q612
Q628
Q629
Q630
RA603
RA605
RA607
RA609
RST*
HBRD*
HBHWR*
HBLWR*
HBAS*
CPUCLK
IP-CS*
IP-ITOP
Z-RESET*
Z-CPU-RD*
Z-CPU-HWR*
Z-CPU-LWR*
Z-CPU-AS*
Z-CPU-CLK
Z-IP-CS*
Z-IP-ITOP
CPU-RFE*
IP-ED-CS*
IP-DSP-CS*
IP-ECO-CS*
IP-MAIN-CS*
RV-CS1*
RV-CS2*
Z-CPU-RFE*
Z-IP-ED-CS*
Z-IP-DSP-CS*
Z-IP-ECO-CS*
Z-IP-MAIN-CS*
Z-RV-CS1*
Z-RV-CS2*
CPU-HSYNC
AM-CPU-INT*
CPU-WAIT*
Z-CPU-HSYNC
Z-AM-CPU-INT
Z-CPU-WAIT*
NC
D<15..0>
A<23..0>
HBRD*
IP-CS*
16
24

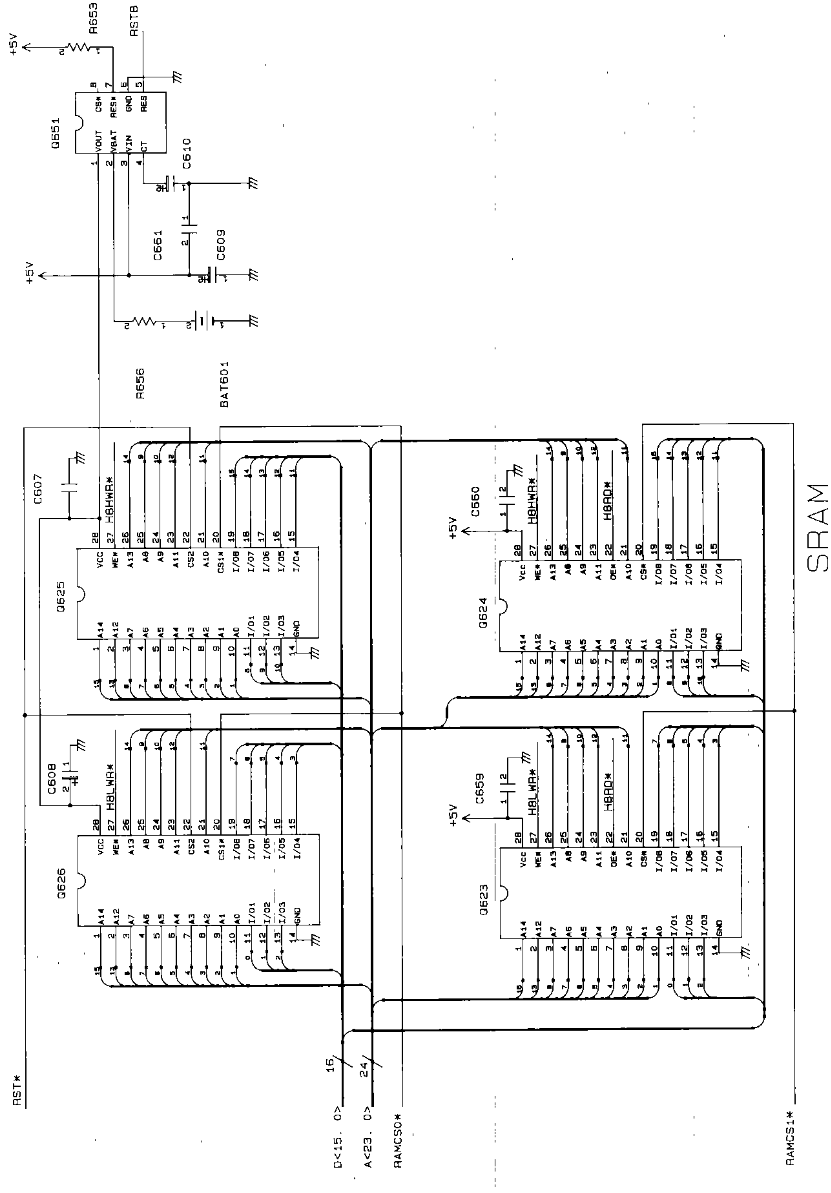
Reader controller circuit diagram (11/13)


CCV
IC Card
Power Supply
J3507
J3604
ZI-CCVCNCT*
ZO-CCVCNT
IPC1-TXD3
IPC1-RXD3
Z-IC-TXD
Z-IC-RXD
R644
R645
R628
R627
Q613
Q618
Q649
+5V
+15V
+24V
C601
C602
C603
C621
C622
C623
Q606
Q609
Q611
Q612
Q618
Q619
Q628
Q629
Q630
Q631
Q632
Q633
Q634
Q635
Q636
Q637
Q638
Q639
Q649
Q650
Q652
Q657
Q607
C615
C616
C617
C618
C619
C624
C625
C626
C627
C628
C630
C631
C633
C634
C638
C640
C645
C646
C650
C652
C662
VCC
GND
D
CK
Q
CLR

Reader controller circuit diagram (12/13)

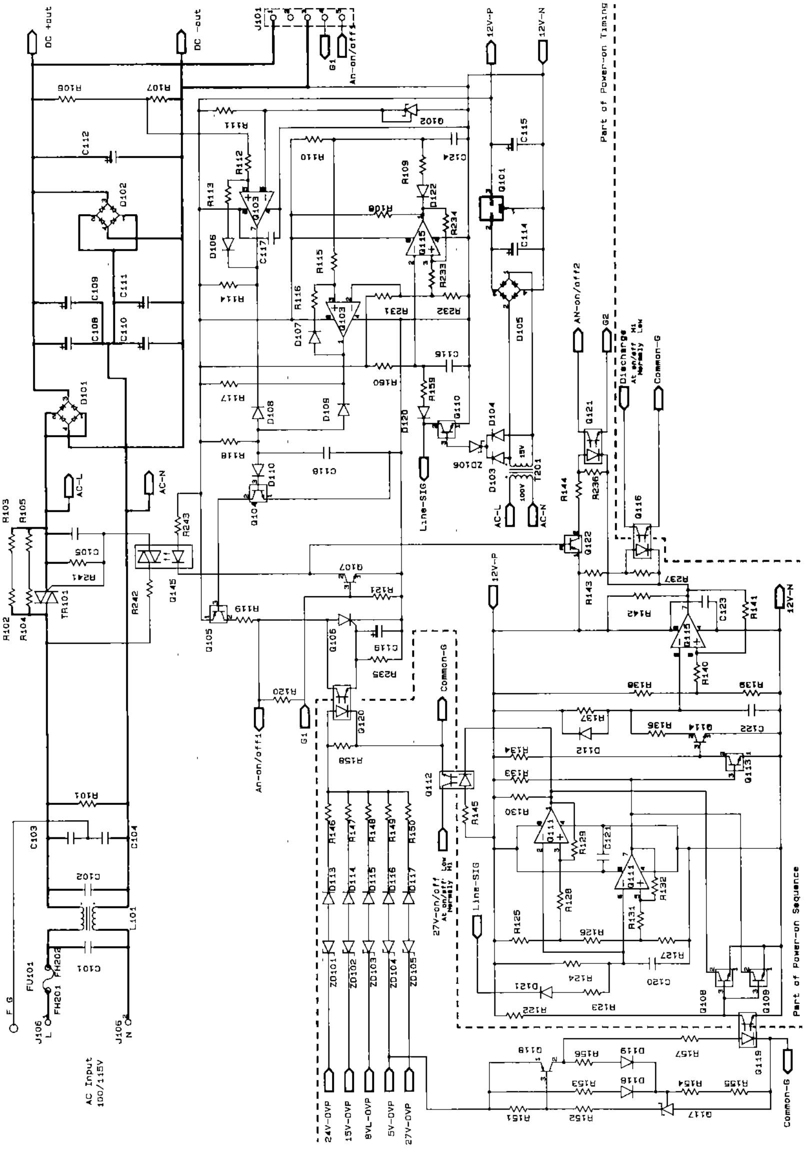

Operation Panel
J3606
+5V
Z-S0
Z-S1
Z-S2
Z-S3
Z-S4
Z-S5
Z-S6
ZO-LEDSCAN0
ZO-LEDSCAN1
ZO-LEDSCAN2
ZO-LEDSCAN3
ZO-LEDSCAN4
ZO-LEDSCAN5
ZO-LEDSCAN6
Q640
Q641
Q642
Q643
Q644
Q645
Q646
Q656
Q633
Q619
ZO-LIGHT
ZO-DISPOFF
UD<3..0>
Q638
R677
R678
R679
R680
R681
R682
R683
CLP
LIP
ERP
ZO-LED0
ZO-LED1
ZO-LED2
Z-LED0
Z-LED1
Z-LED2
Q639
Q609
BCRXD
C668
R655
R656
R657
Z-RXD
ZO-BEEP
Z-BUZZER
SCAN<11..0>
Q636
Q637
R665
R666
R667
R668
R669
R670
R671
R672
R673
R674
R675
R676
ZO-SCAN0
ZO-SCAN1
ZO-SCAN2
ZO-SCAN3
ZO-SCAN4
ZO-SCAN5
ZO-SCAN6
ZO-SCAN7
ZO-SCAN8
ZO-SCAN9
ZO-SCAN10
ZO-SCAN11
ZI-RTN20
ZI-RTN21
ZI-RTN22
RA606
RA608
DA611
DA612
DA613
Z-SW0
Z-SW1
Z-SW2
ZI-RTN0
ZI-RTN1
ZI-RTN2
ZI-RTN3
ZI-RTN4
ZI-RTN5
ZI-RTN6
ZI-RTN7
RA604
RA602
RA601
DA603
DA604
DA605
DA606
DA607
DA608
DA609
DA610
ZI-RTN8
ZI-RTN9
ZI-RTN10
ZI-RTN11
ZI-RTN12
ZI-RTN13
ZI-RTN14
ZI-RTN15
RA616
RA617
RA614
DA618
DA619
DA620
DA621
DA622
DA623
DA624
DA625
ZI-RTN16
ZI-RTN17
ZI-RTN18
ZI-RTN19
RA615
RA610
DA614
DA615
DA616
DA617
TSW<19..0>
12/ SCAN<11..0>
20/ TSW<19..0>
Z-SCAN0
Z-SCAN1
Z-SCAN2
Z-SCAN3
Z-SCAN4
Z-SCAN5
Z-SCAN6
Z-SCAN7
Z-SCAN8
Z-SCAN9
Z-SCAN10
Z-SCAN11
Z-TSW0
Z-TSW1
Z-TSW2
Z-TSW3
Z-TSW4
Z-TSW5
Z-TSW6
Z-TSW7
Z-TSW8
Z-TSW9
Z-TSW10
Z-TSW11
Z-TSW12
Z-TSW13
Z-TSW14
Z-TSW15
Z-TSW16
Z-TSW17
Z-TSW18
Z-TSW19
NC

Reader controller circuit diagram (13/13)

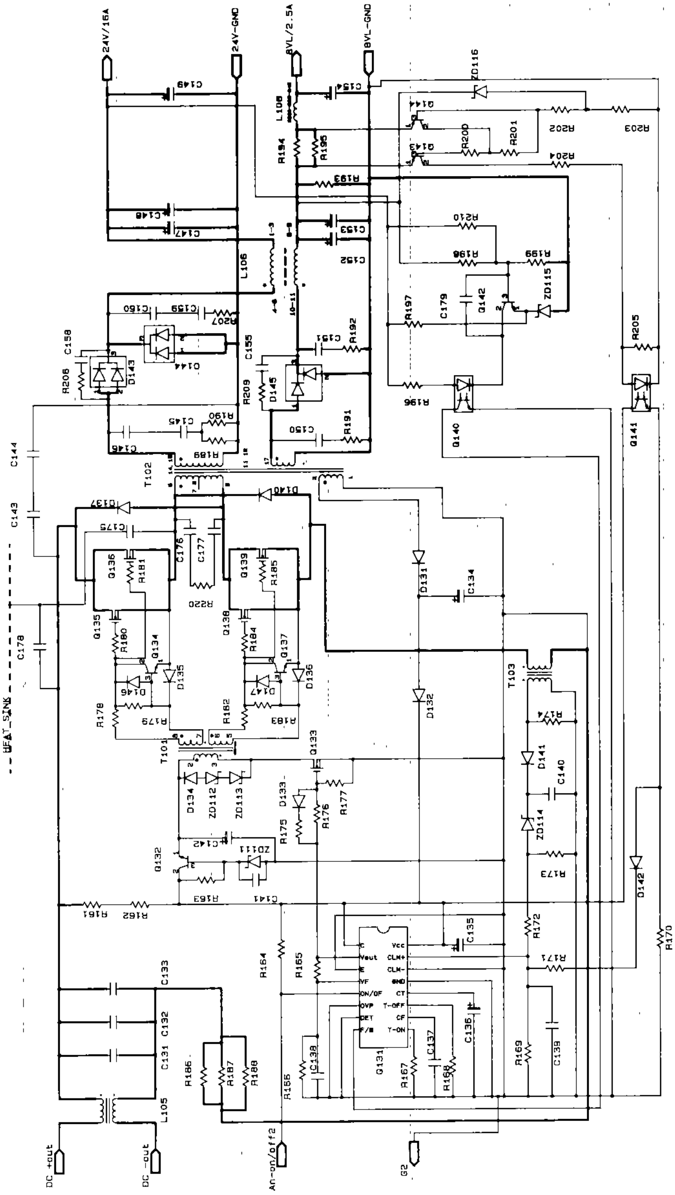

+5V
R653
RSTB
Q651
VOUT
VBAT
VIN
CT
CS*
RES*
GND
RES
C610
C661
C609
R656
BAT601
C607
H8HWR*
Q625
C608
H8LWR*
Q626
C650
Q624
H8RD*
C659
Q623
Vcc
WE*
OE*
CS1*
CS2
GND
SRAM
RST*
16
24
D<15. 0>
A<23. 0>
RAMCS0*
RAMCS1*

F. MAIN POWER SUPPLY CIRCUIT DIAGRAM

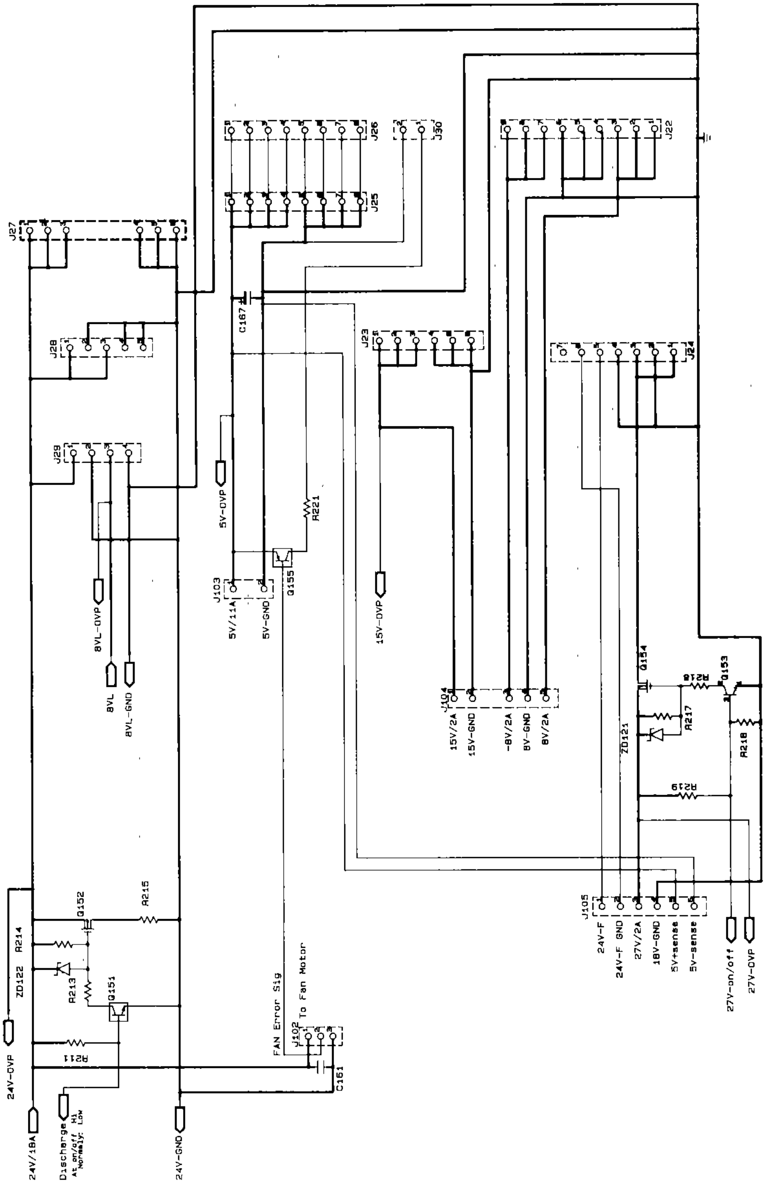
Main power supply circuit diagram (1/5)


DC +out
DC -out
J101
G1
An-on/off1
12V-P
12V-N
Part of Power-on Timing
R106
R107
R111
ZD102
C112
R110
C124
R112
R113
Q103
D102
R108
R109
D122
Q101
C115
C114
D106
C117
R115
Q115
R234
R233
C109
C111
R114
R116
Q102
R231
R232
D105
AN-on/off2
G2
C108
C110
D107
C116
R160
R159
Q110
D104
R117
D108
D109
D101
D120
Q121
Discharge
At on/off Hi
Normally Low
Common-G
R118
C118
D110
ZD106
D103
T201
15V
100V
AC-L
AC-N
Line-SIG
R144
R236
Q116
Q104
R243
R103
R105
C105
R241
Q145
R242
TR101
R102
R104
Q107
R121
Q122
R143
R237
R119
Q105
Q106
C119
R235
R142
C123
R141
R140
R120
R138
R139
Q120
R137
R136
Q114
C122
R158
D112
R134
R133
Q113
Q112
R145
R130
R101
C103
C104
C102
R146
R147
R148
R149
R150
D113
D114
D115
D116
D117
27V-on/off
At on/off Low
Normally Hi
Q111
R129
C121
R128
R132
R131
L101
R125
R126
R127
C101
FU101
FH202
FH201
ZD101
ZD102
ZD103
ZD104
ZD105
D121
R124
C120
R122
R123
Q108
Q109
F.G
J106
L
N
AC Input
100/115V
Part of Power-on Sequence
Q119
R157
D119
R156
Q118
R153
D118
R154
R155
R151
R152
Q117
24V-OVP
15V-OVP
8VL-OVP
5V-OVP
27V-OVP

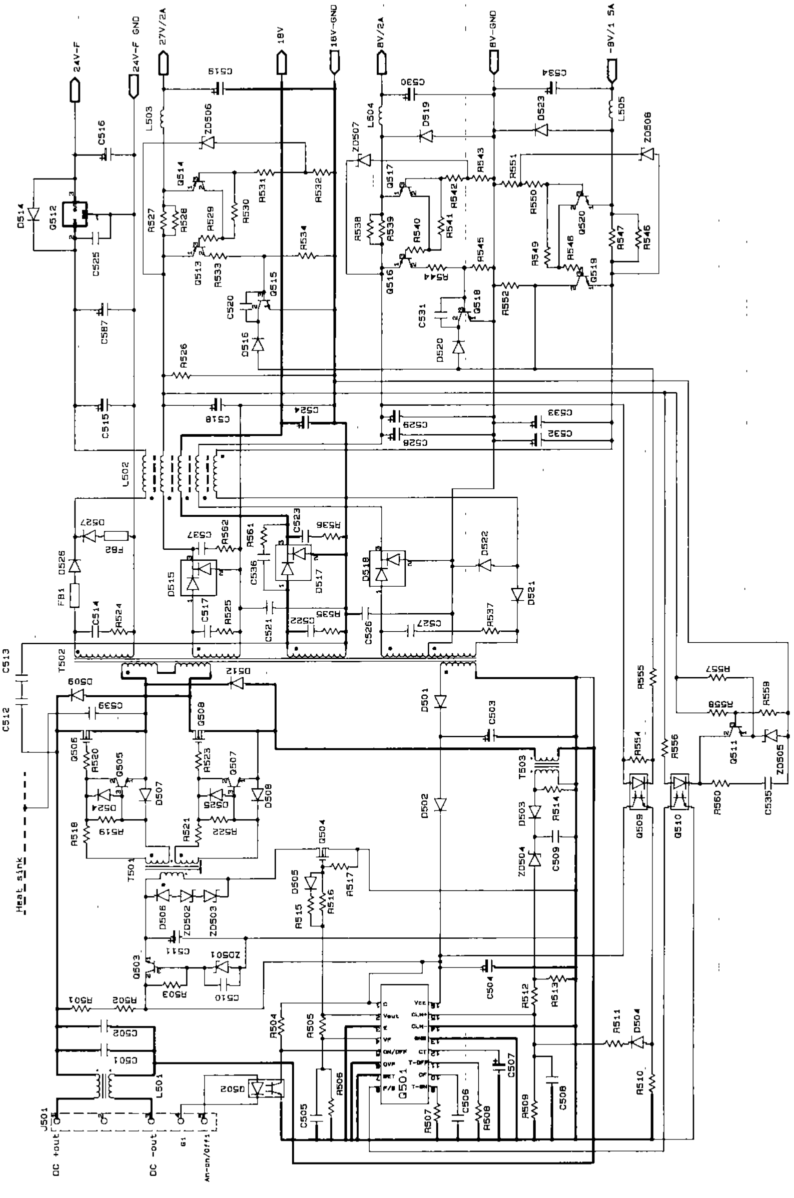
Main power supply circuit diagram (2/5)


24V/16A
24V-GND
8VL/2.5A
8VL-GND
ZD116
Q144
Q143
R200
R201
R202
R203
R204
L108
R194
R195
R193
C149
C148
C147
C154
C153
C152
L106
R210
R198
R199
ZD115
Q142
C179
R197
R192
C151
C160
C159
R207
D144
C158
R208
D143
C155
R209
D145
R205
R196
Q140
Q141
R190
C145
C146
R189
C150
R191
C144
C143
T102
D137
D140
C175
C176
C177
Q136
R181
Q139
R185
R220
Q135
R180
Q134
D135
Q138
R184
Q137
D136
D146
D147
R178
R179
R182
R183
T101
D131
C134
D132
T103
C178
HEAT_SINK
R174
D141
C140
ZD114
R173
D134
ZD112
ZD113
D133
Q133
R176
R177
R175
Q132
C142
ZD111
R163
C141
R161
R162
D142
R172
R170
R171
C135
C
Vcc
Vout
CLM+
E
CLM-
VF
GND
ON/OF
CT
OVP
T-OFF
DET
CF
F/B
T-ON
Q131
C136
C137
R168
R167
R169
C139
C138
R166
R165
R164
C133
C132
C131
R186
R187
R188
L105
DC +out
DC -out
An-on/off2
G2

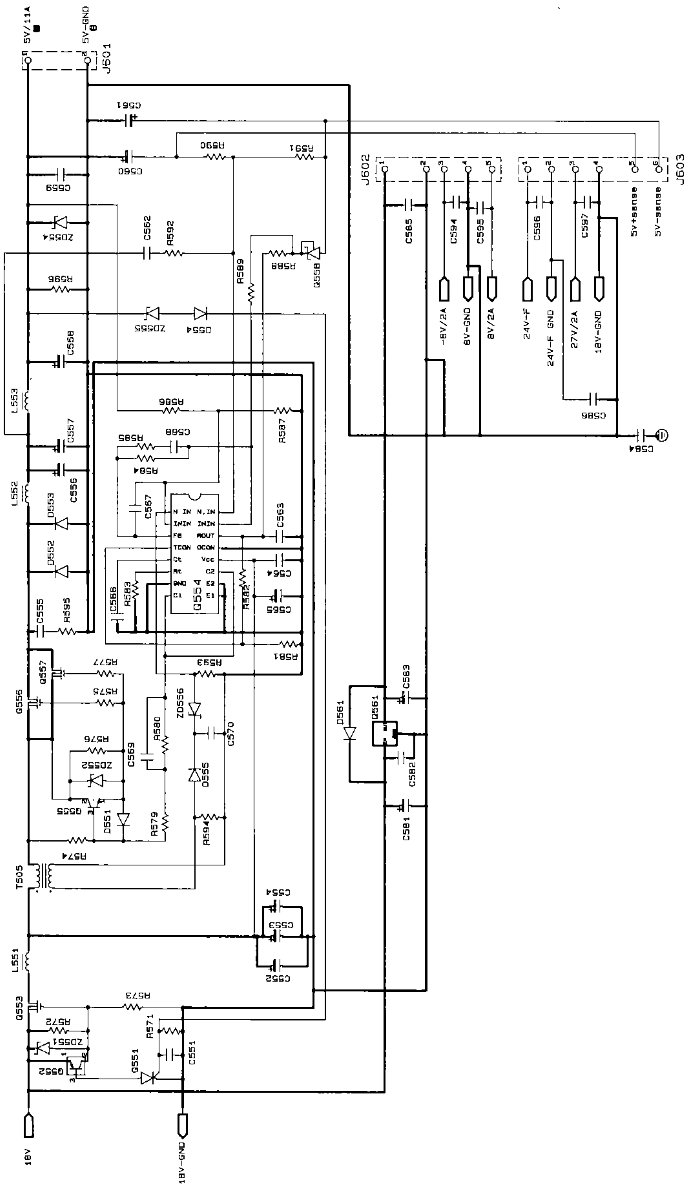
Main power supply circuit diagram (3/5)


J27
J28
J29
J26
J30
J25
J22
J23
J24
C167
5V-OVP
R221
J103
5V/11A
5V-GND
Q155
15V-OVP
8VL-OVP
8VL
8VL-GND
J104
15V/2A
15V-GND
-8V/2A
8V-GND
8V/2A
Q154
R216
Q153
R217
ZD121
R218
R219
J105
24V-F
24V-F GND
27V/2A
18V-GND
5V+sense
5V-sense
27V-on/off
27V-OVP
Q152
R215
R214
ZD122
R213
Q151
24V-OVP
R211
J102
FAN Error Sig
To Fan Motor
C161
24V/18A
Discharge
At on/off: Hi
Normally: Low
24V-GND

Main power supply circuit diagram (4/5)

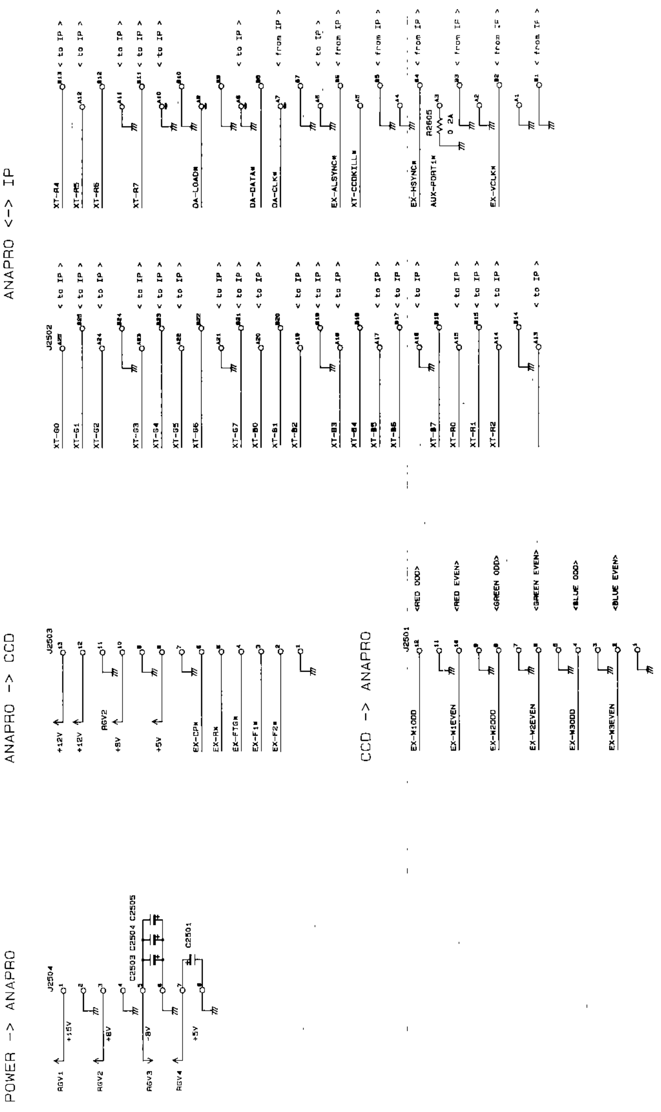

24V-F
24V-F GND
27V/2A
18V
18V-GND
8V/2A
8V-GND
-8V/1.5A
DC +out
DC -out
G1
An-on/off
J501
Heat sink
T501
T502
T503
L501
L502
L503
L504
L505
Q501
Q502
Q503
Q504
Q505
Q506
Q507
Q508
Q509
Q510
Q511
Q512
Q513
Q514
Q515
Q516
Q517
Q518
Q519
Q520
D514
D515
D517
D518
FB1
FB2

Main power supply circuit diagram (5/5)

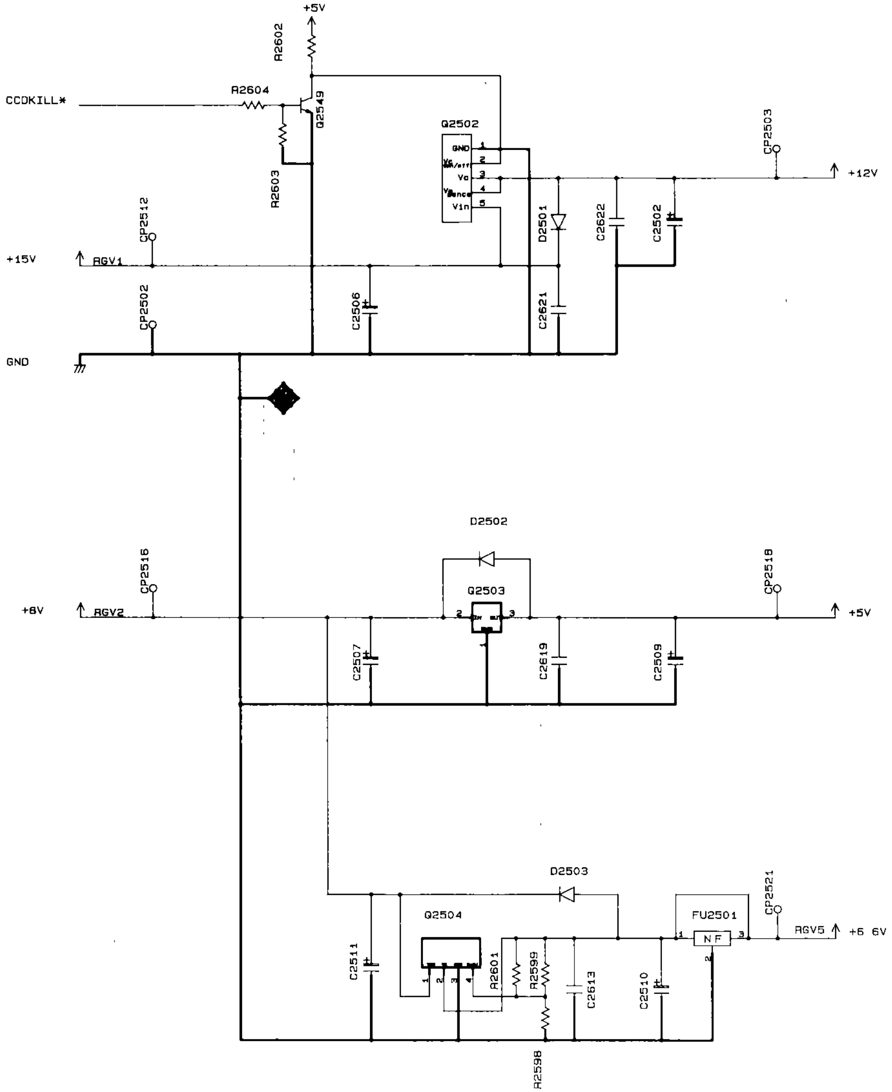

5V/11A
5V-GND
J601
C561
C560
R590
R591
J602
J603
C559
ZD554
C562
R592
R589
R588
Q558
R596
ZD555
D554
C558
L553
R586
R587
C557
C568
R585
R584
C556
L552
D553
C567
C563
D552
C564
C566
R583
R582
Q554
C565
C555
R595
Q557
R577
R593
R581
Q556
R575
ZD556
R576
C569
R580
C570
ZD552
D555
Q555
D551
R579
R594
R574
T505
C554
C553
L551
C552
Q553
R573
R572
R571
ZD551
Q552
Q551
C551
18V
18V-GND
C565
C594
C595
C596
C597
5V+sense
5V-sense
-8V/2A
8V-GND
8V/2A
24V-F
24V-F GND
27V/2A
18V-GND
C586
C584
D561
Q561
C583
C582
C581

G. ANALOG PROCESSOR CIRCUIT DIAGRAM

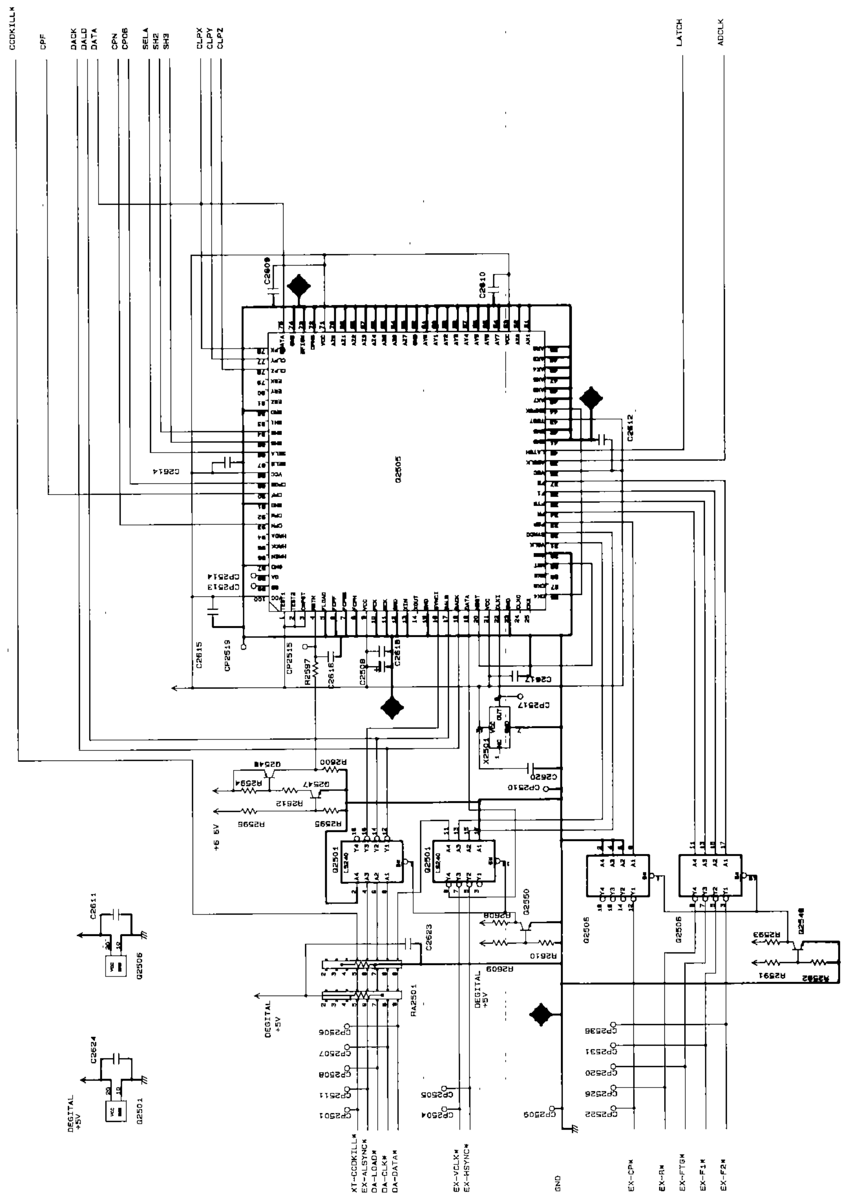
Analog processor circuit diagram (1/5)


ANAPRO <-> IP
J2502
XT-R4
XT-R5
XT-R6
XT-R7
DA-LOAD*
DA-DATA*
DA-CLK*
EX-ALSYNC*
XT-CCDKILL*
EX-HSYNC*
AUX-PORT1*
R2605
0 2A
EX-VCLK*
< to IP >
< from IP >
XT-G0
XT-G1
XT-G2
XT-G3
XT-G4
XT-G5
XT-G6
XT-G7
XT-B0
XT-B1
XT-B2
XT-B3
XT-B4
XT-B5
XT-B6
XT-B7
XT-R0
XT-R1
XT-R2
ANAPRO -> CCD
J2503
+12V
+12V
RGV2
+5V
+5V
EX-CP*
EX-RM
EX-FTG*
EX-F1*
EX-F2*
CCD -> ANAPRO
J2501
EX-W1ODD
EX-W1EVEN
EX-W2ODD
EX-W2EVEN
EX-W3ODD
EX-W3EVEN
<RED ODD>
<RED EVEN>
<GREEN ODD>
<GREEN EVEN>
<BLUE ODD>
<BLUE EVEN>
POWER -> ANAPRO
J2504
+15V
+8V
-8V
+5V
RGV1
RGV2
RGV3
RGV4
C2503 C2504 C2505
C2501

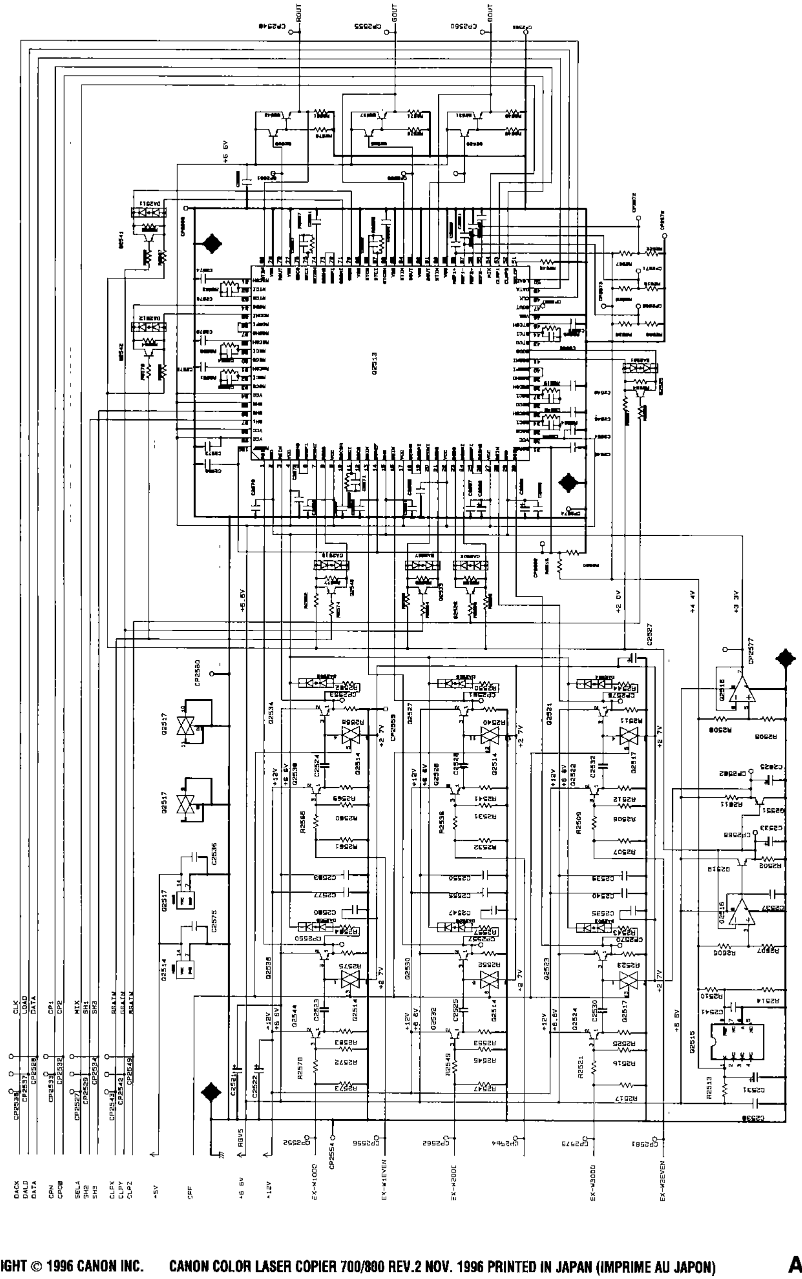
Analog processor circuit diagram (2/5)


+5V
R2602
CCDKILL*
R2604
Q2549
R2603
Q2502
GND
Vc on/off
Vo
Vo sence
Vin
1
2
3
4
5
CP2503
+12V
CP2512
+15V
RGV1
D2501
C2622
C2502
CP2502
C2506
C2621
GND
D2502
CP2516
Q2503
CP2518
+8V
RGV2
2
3
1
+5V
C2507
C2619
C2509
D2503
CP2521
Q2504
FU2501
NF
1
3
2
RGV5
+6 6V
C2511
1
2
3
4
R2601
R2599
C2613
C2510
R2598

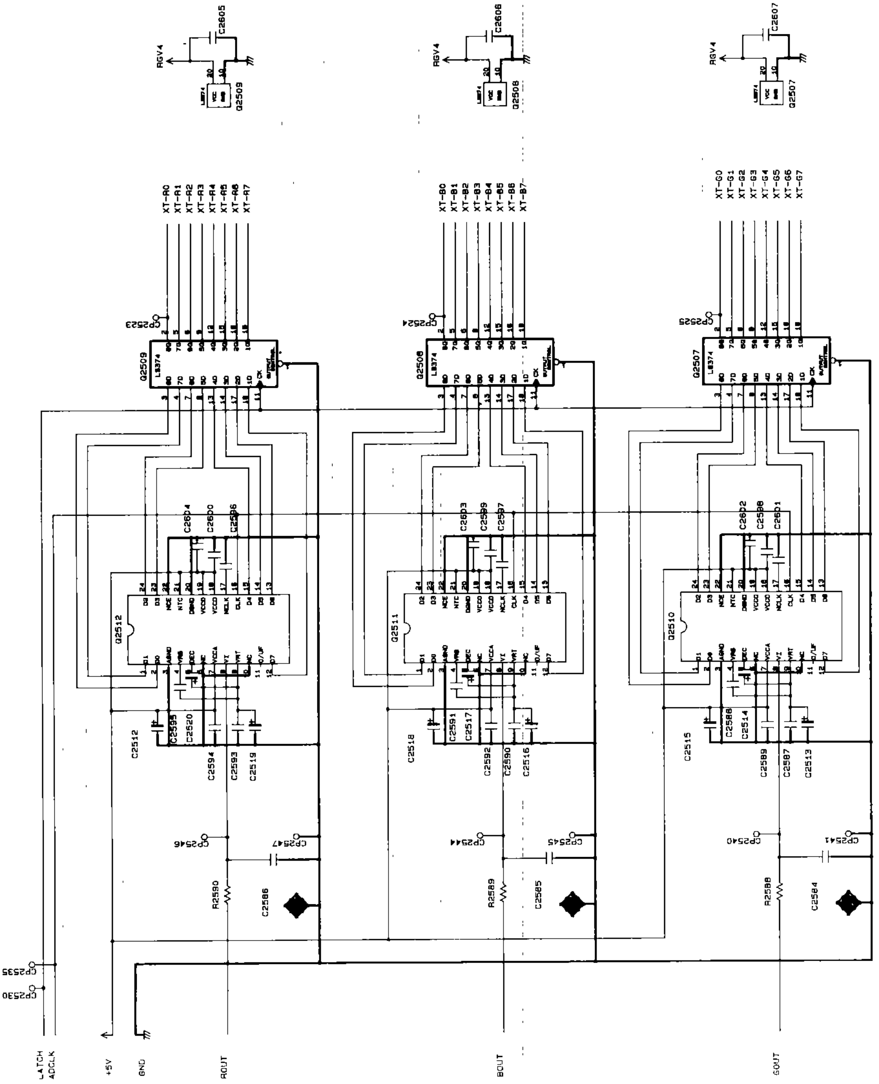
Analog processor circuit diagram (3/5)


CCDKILL*
CPF
DACK
DALD
DATA
CPN
CPOB
SELA
SH2
SH3
CLPX
CLPY
CLPZ
LATCH
ADCLK
Q2505
C2609
C2610
C2612
C2614
CP2513
CP2514
C2615
CP2519
CP2515
R2597
C2616
C2508
C2618
C2617
CP2517
X2501
C2620
CP2510
R2600
Q2548
Q2547
R2594
R2612
R2596
R2595
+5 5V
Q2501
LS240
Q2550
R2608
R2610
R2609
C2623
RA2501
DEGITAL +5V
Q2505
Q2506
R2593
Q2549
R2591
R2592
C2611
C2624
Q2506
Q2501
VCC
GND
CP2506
CP2507
CP2508
CP2511
CP2501
CP2505
CP2504
CP2509
CP2536
CP2531
CP2520
CP2526
CP2522
XT-CCDKILL*
EX-ALSYNC*
DA-LOAD*
DA-CLK*
DA-DATA*
EX-VCLK*
EX-HSYNC*
GND
EX-CP*
EX-R*
EX-FTG*
EX-F1*
EX-F2*

Analog processor circuit diagram (4/5)

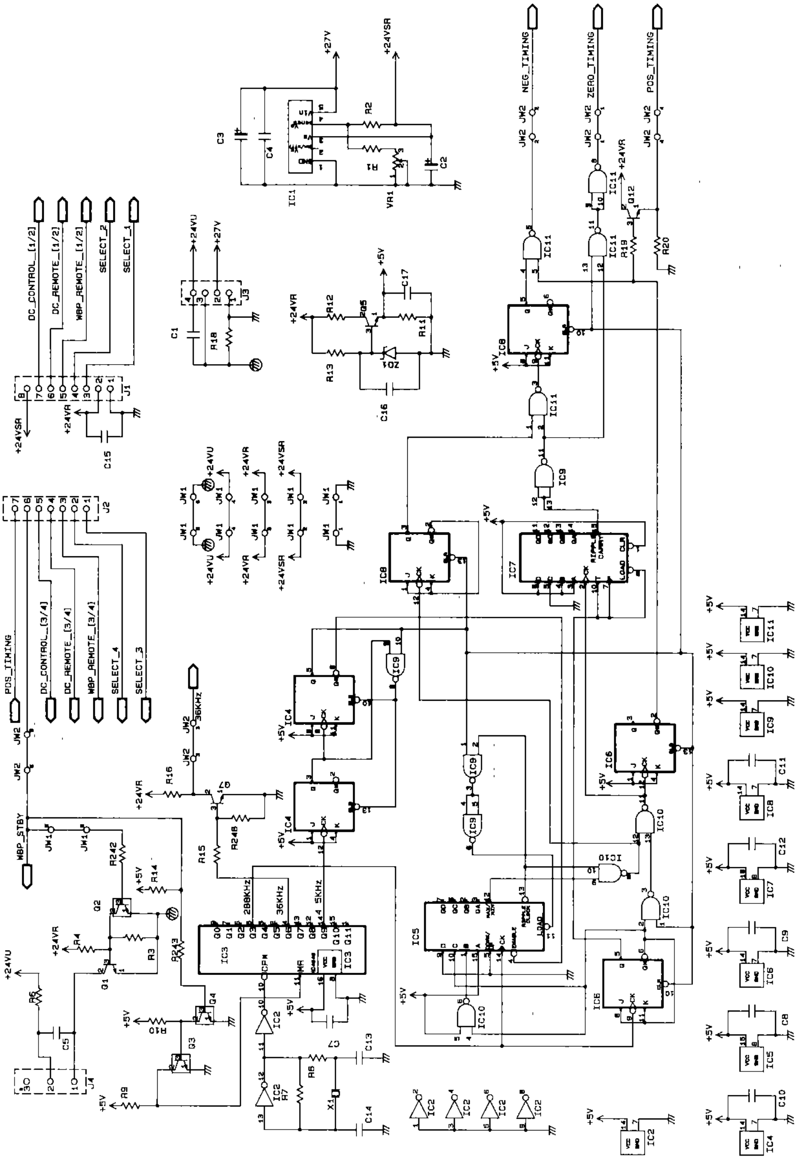

ROUT
GOUT
BOUT
CP2548
CP2555
CP2560
Q2513
+6.6V
+2.0V
+4.4V
+3.3V
C2527
CP2577
CP2580
Q2517
Q2514
Q2515
Q2516
Q2518
CLK
LOAD
DATA
CP1
CP2
MIX
SH1
SH3
RGAIN
CP2536
CP2537
CP2528
CP2533
CP2532
CP2529
CP2534
CP2543
CP2542
CP2549
C2521
C2522
RGV5
CP2552
CP2554
CP2556
CP2562
CP2564
CP2575
CP2581
DACK
DALD
DATA
CPN
CPOB
SELA
SH2
SH3
CLPX
CLPY
CLP2
+5V
CPF
+6.6V
+12V
EX-W1ODD
EX-W1EVEN
EX-W2ODD
EX-W2EVEN
EX-W3ODD
EX-W3EVEN

Analog processor circuit diagram (5/5)

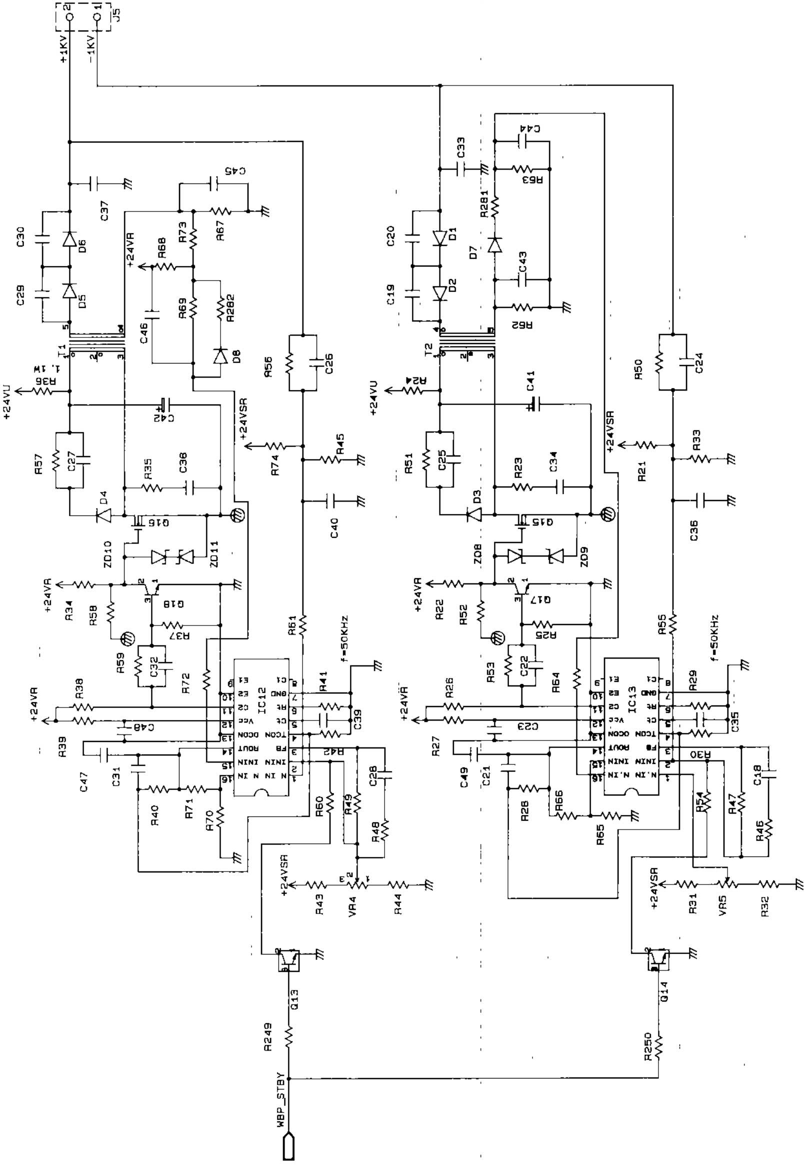

Q2509
Q2508
Q2507
C2605
C2606
C2607
RGV4
LS374
XT-R0
XT-R1
XT-R2
XT-R3
XT-R4
XT-R5
XT-R6
XT-R7
XT-B0
XT-B1
XT-B2
XT-B3
XT-B4
XT-B5
XT-B6
XT-B7
XT-G0
XT-G1
XT-G2
XT-G3
XT-G4
XT-G5
XT-G6
XT-G7
CP2523
CP2524
CP2525
Q2512
Q2511
Q2510
C2604
C2600
C2596
C2603
C2599
C2597
C2602
C2598
C2601
C2512
C2595
C2520
C2594
C2593
C2519
C2518
C2591
C2517
C2592
C2590
C2516
C2515
C2588
C2514
C2589
C2587
C2513
CP2546
CP2547
CP2544
CP2545
CP2540
CP2541
R2590
C2586
R2589
C2585
R2588
C2584
CP2535
CP2530
LATCH
ADCLK
+5V
GND
ROUT
BOUT
GOUT

H. DEVELOPING BIAS CIRCUIT DIAGRAM

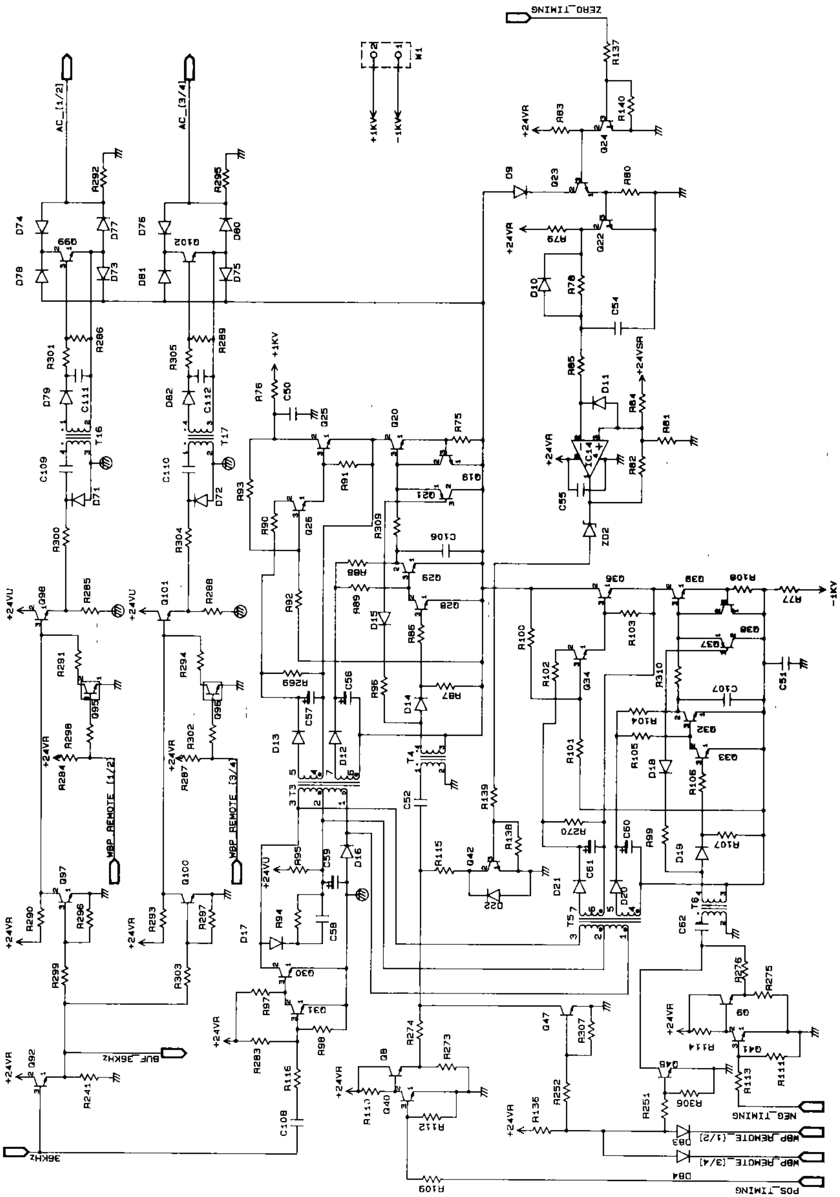
Developing bias circuit diagram (1/6)


NEG_TIMING
ZERO_TIMING
POS_TIMING
DC_CONTROL_[1/2]
DC_REMOTE_[1/2]
WBP_REMOTE_[1/2]
SELECT_2
SELECT_1
DC_CONTROL_[3/4]
DC_REMOTE_[3/4]
WBP_REMOTE_[3/4]
SELECT_4
SELECT_3
WBP_STBY
36KHz
288KHz
4.5KHz
+27V
+24VSR
+24VR
+24VU
+5V
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
IC9
IC10
IC11
J1
J2
J3
J4
JW1
JW2
X1
VR1
ZD1

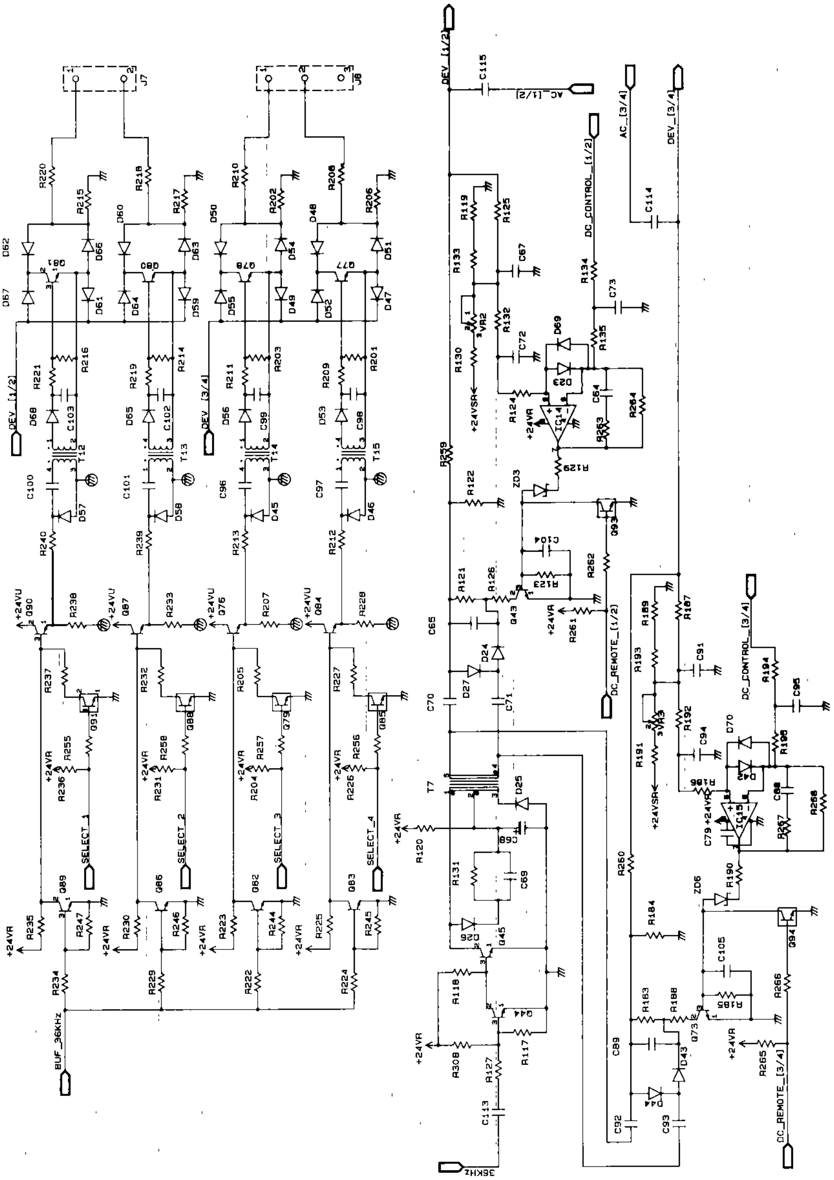
Developing bias circuit diagram (2/6)


J5
+1KV
-1KV
C30
C29
D6
D5
C37
+24VR
R68
R73
R67
C45
R69
R282
C46
D8
T1
R36
1.1W
+24VU
C42
+24VSR
R56
C26
R57
C27
R35
C38
R74
R45
D4
Q16
C40
ZD10
ZD11
+24VR
R34
R58
Q18
R37
R61
f=50KHz
R59
C32
R72
IC12
R41
R38
C48
C39
R39
C47
C31
R42
C28
R40
R71
R70
R60
R49
R48
R43
VR4
R44
Q13
R249
WBP_STBY
C20
C19
D1
D2
C33
C44
R63
R281
D7
C43
R62
T2
R24
C41
R51
C25
R23
C34
R50
C24
R21
R33
D3
Q15
C36
ZD8
ZD9
R22
R52
Q17
R25
R55
R53
C22
R64
IC13
R26
R29
C23
C35
R27
C49
C21
R30
C18
R28
R66
R65
R54
R47
R46
R31
VR5
R32
Q14
R250
E1
E2
GND
RT
CT
Vcc
DCON
TCON
ROUT
FB
ININ
N.IN

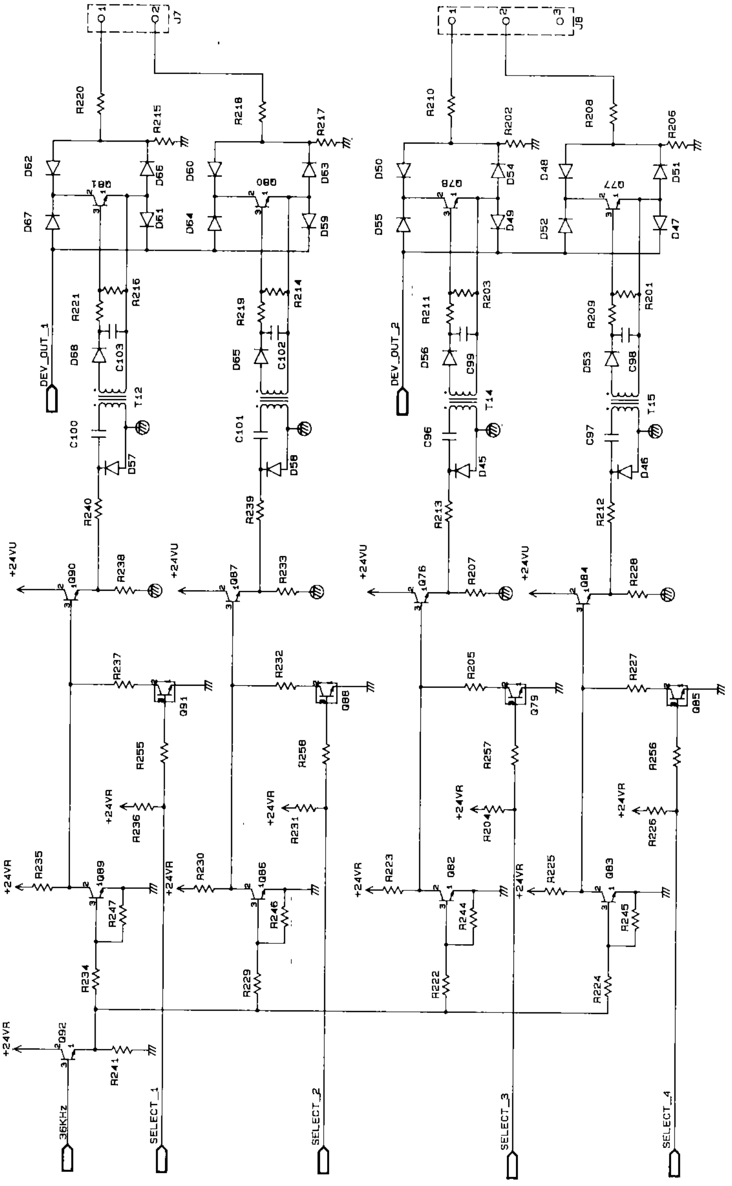
Developing bias circuit diagram (3/6)


ZERO_TIMING
AC_[1/2]
AC_[3/4]
W1
+1KV
-1KV
+24VR
+24VU
+24VSR
-1KV
36KHz
BUF_36KHz
WBP_REMOTE_[1/2]
WBP_REMOTE_[3/4]
NEG_TIMING
WBP_REMOTE_[1/2]
WBP_REMOTE_[3/4]
POS_TIMING
T3
T4
T5
T6
T16
T17
IC14
Q8
Q9
Q20
Q21
Q22
Q23
Q24
Q25
Q26
Q28
Q29
Q30
Q31
Q32
Q33
Q34
Q35
Q36
Q37
Q38
Q40
Q41
Q42
Q46
Q47
Q82
Q95
Q96
Q97
Q98
Q99
Q100
Q101
Q102
D9
D10
D11
D12
D13
D14
D15
D16
D17
D18
D19
D20
D21
D22
D71
D72
D73
D74
D75
D76
D77
D78
D79
D80
D81
D82
D83
D84
ZD2
C50
C51
C52
C54
C55
C56
C57
C58
C59
C60
C61
C62
C106
C107
C108
C109
C110
C111
C112
R75
R76
R77
R78
R79
R80
R81
R82
R83
R84
R85
R86
R87
R88
R89
R90
R91
R92
R93
R94
R95
R96
R97
R98
R99
R100
R101
R102
R103
R104
R105
R106
R107
R108
R109
R110
R111
R112
R113
R114
R115
R116
R135
R136
R137
R138
R139
R140
R241
R251
R252
R269
R270
R273
R274
R275
R276
R283
R284
R285
R286
R287
R288
R289
R290
R291
R292
R293
R294
R295
R296
R297
R298
R299
R300
R301
R302
R303
R304
R305
R306
R307
R309
R310

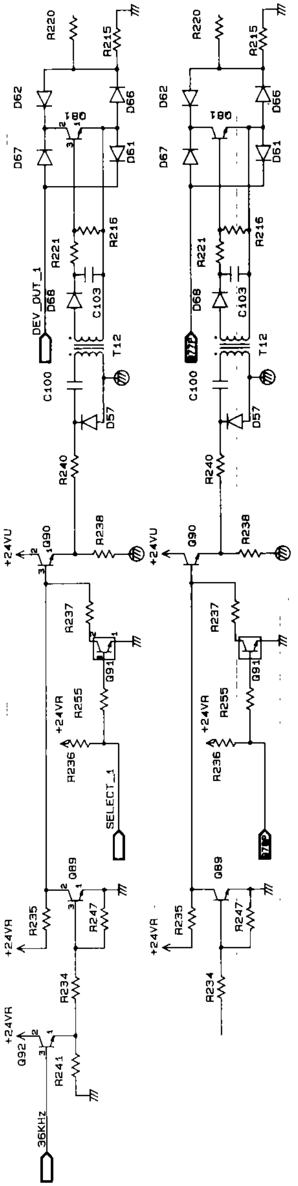
Developing bias circuit diagram (4/6)


J7
J8
DEV_[1/2]
AC_[1/2]
DC_CONTROL_[1/2]
AC_[3/4]
DEV_[3/4]
DC_REMOTE_[1/2]
DC_CONTROL_[3/4]
DC_REMOTE_[3/4]
36KHZ
BUF_36KHZ
SELECT_1
SELECT_2
SELECT_3
SELECT_4
T7
T12
T13
T14
T15
IC14
IC15
VR2
VR3
+24VR
+24VU
+24VSR
C115
C114

Developing bias circuit diagram (5/6)

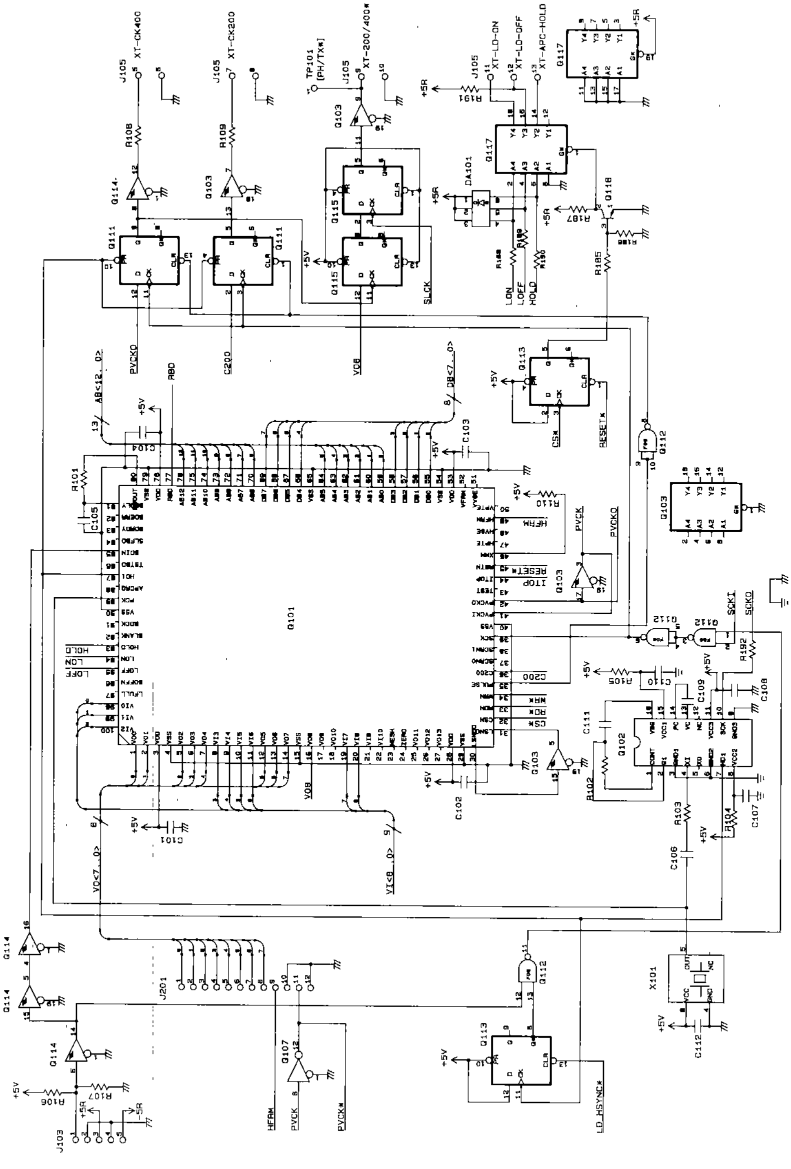

J7
J8
R220
R215
R218
R217
D62
D66
D60
D63
Q81
Q80
D67
D61
D64
D59
R221
R216
R219
R214
D68
C103
D65
C102
DEV_OUT_1
T12
C100
D57
C101
D58
R240
R239
+24VU
Q90
R238
Q87
R233
R237
Q91
R232
Q88
R255
R258
+24VR
R236
R231
R235
Q89
R230
Q86
R247
R246
R234
R229
Q92
R241
36KHz
SELECT_1
SELECT_2
R210
R202
R208
R206
D50
D54
D48
D51
Q78
Q77
D55
D49
D52
D47
R211
R203
R209
R201
D56
C99
D53
C98
DEV_OUT_2
T14
T15
C96
D45
C97
D46
R213
R212
Q76
R207
Q84
R228
R205
Q79
R227
Q85
R257
R256
R204
R226
R223
Q82
R225
Q83
R244
R245
R222
R224
SELECT_3
SELECT_4

Developing bias circuit diagram (6/6)

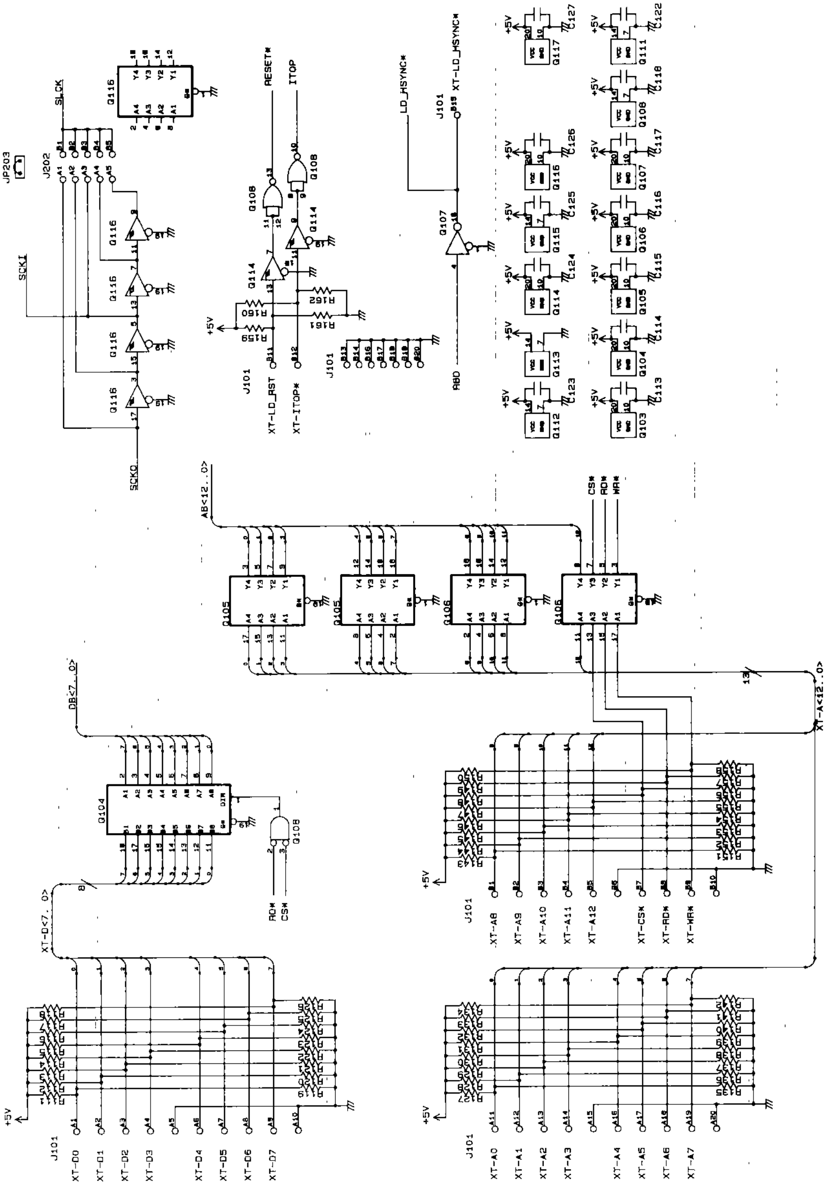

R220
R215
D62
D66
D67
D61
Q81
R221
R216
DEV_OUT_1
D68
C103
T12
C100
D57
R240
R238
+24VU
Q90
R237
Q91
+24VR
R255
R236
SELECT_1
Q89
R235
R247
R234
Q92
R241
36KHz

I. LASER CONTROLLER CIRCUIT DIAGRAM

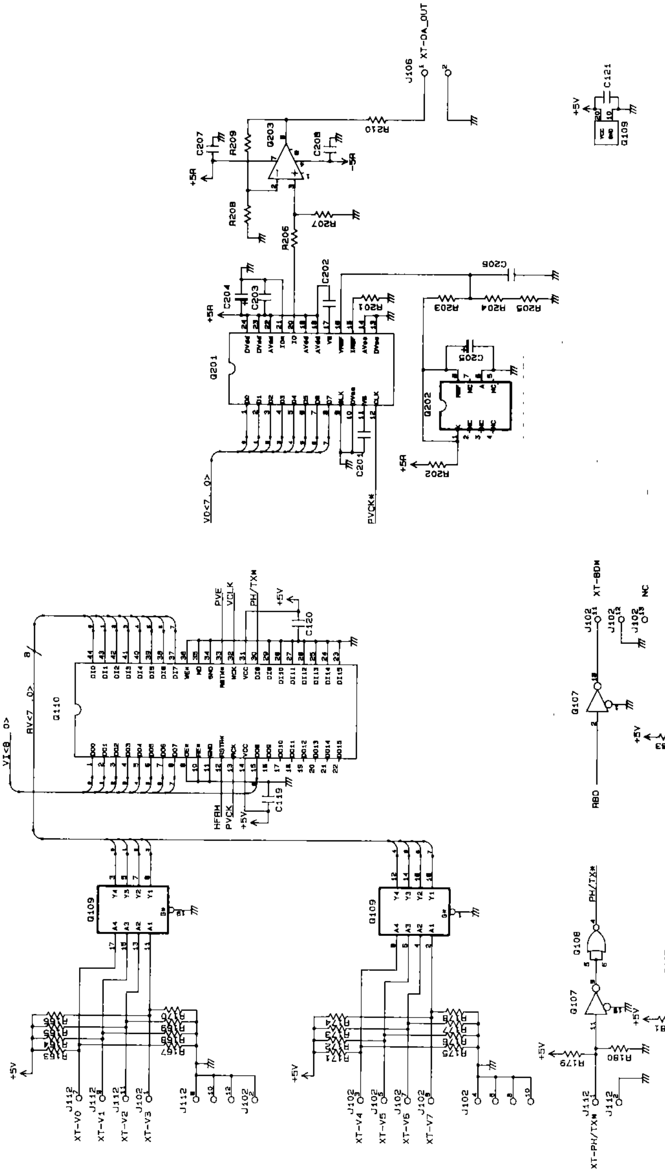
Laser controller circuit diagram (1/4)


J105
XT-CK400
XT-CK200
TP101
[PH/TX*]
XT-200/400*
XT-LD-ON
XT-LD-OFF
XT-APC-HOLD
Q117
R108
R109
Q114
Q103
Q111
Q115
DA101
R191
R187
Q118
R185
R186
R188
R189
R190
LON
LOFF
HOLD
SLCK
PVCKO
RBO
C200
VO8
AB<12..0>
DB<7..0>
Q113
CS*
RESET*
Q112
C103
C104
R101
C105
Q101
R110
HFRM
PVCK
ITOP
C102
C101
VO<7..0>
VI<8..0>
C111
Q102
R102
R103
R104
R105
C110
C109
C108
C107
C106
R192
SCKI
SCKO
WR*
RD*
X101
C112
J201
Q107
PVCK*
LD_HSYNC*
J103
R106
R107
+5V
+5R
-5R

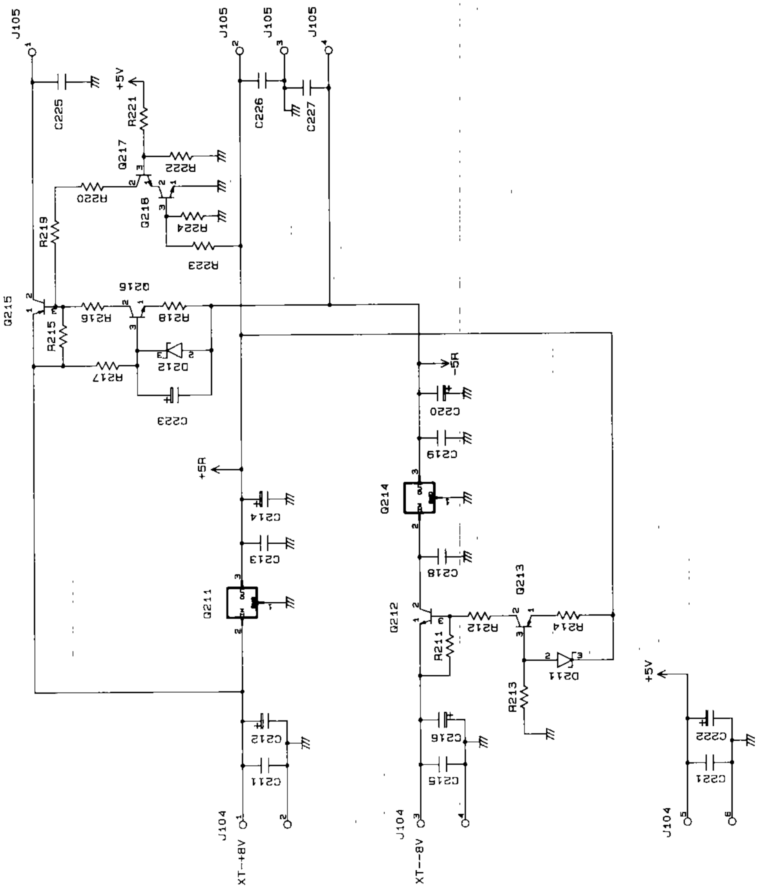
Laser controller circuit diagram (2/4)


JP203
J202
Q116
SLCK
SCKI
SCKO
RESET*
ITOP
Q108
Q114
R159
R160
R161
R162
J101
XT-LD_RST
XT-ITOP*
LD_HSYNC*
XT-LD_HSYNC*
Q107
BD
+5V
Q112
Q113
Q114
Q115
Q116
Q117
C123
C124
C125
C126
C127
Q103
Q104
Q105
Q106
Q107
Q108
Q111
C113
C114
C115
C116
C117
C118
C122
AB<12..0>
CS*
RD*
WR*
Q105
Q106
13
XT-A<12..0>
DB<7..0>
Q104
DIR
G
RD*
CS*
8
XT-D<7..0>
XT-D0
XT-D1
XT-D2
XT-D3
XT-D4
XT-D5
XT-D6
XT-D7
XT-A0
XT-A1
XT-A2
XT-A3
XT-A4
XT-A5
XT-A6
XT-A7
XT-A8
XT-A9
XT-A10
XT-A11
XT-A12
XT-CS*
XT-RD*
XT-WR*

Laser controller circuit diagram (3/4)

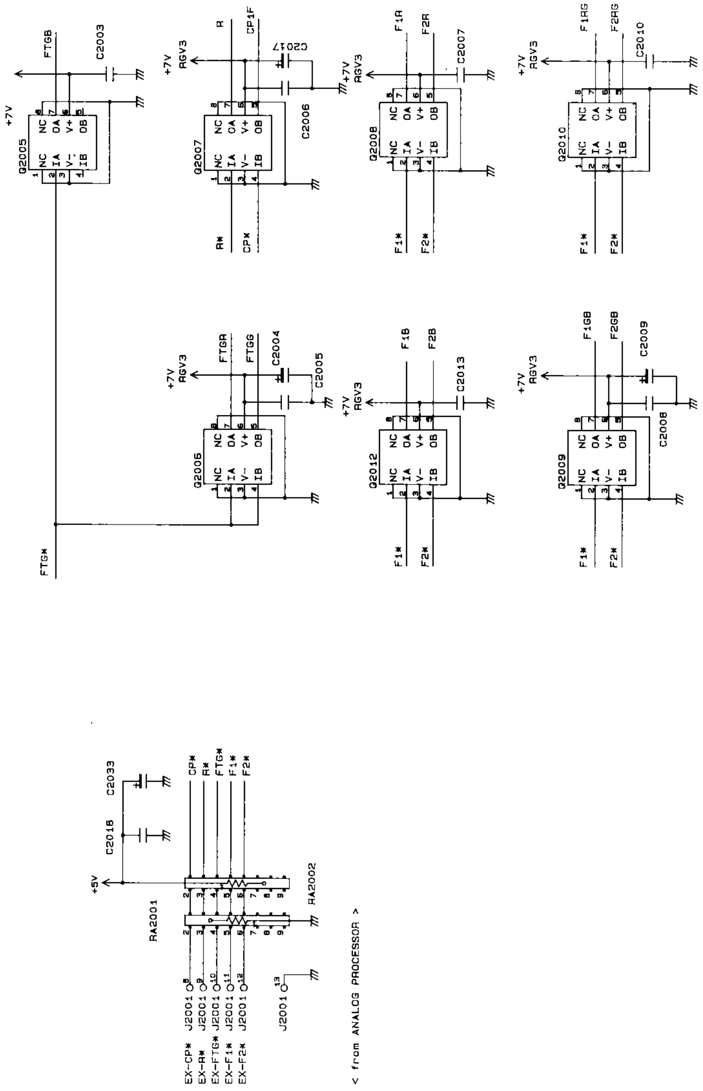

J106
XT-DA_OUT
R210
Q203
R209
C207
C208
+5A
-5A
R208
R207
R206
C204
C203
C202
Q201
R201
R203
R204
R205
C206
C205
Q202
R202
C201
VD<7..0>
PVCK*
+5V
C121
Q109
Q110
VI<8..0>
RV<7..0>
PVE
VCLK
PH/TX*
C120
C119
HFBM
PVCK
Q107
Q108
XT-BD*
J102
NC
RBD
R183
R184
J112
XT-PVE*
R179
R180
R181
R182
XT-PH/TX*
XT-VCLK*
XT-V0
XT-V1
XT-V2
XT-V3
XT-V4
XT-V5
XT-V6
XT-V7

Laser controller circuit diagram (4/4)

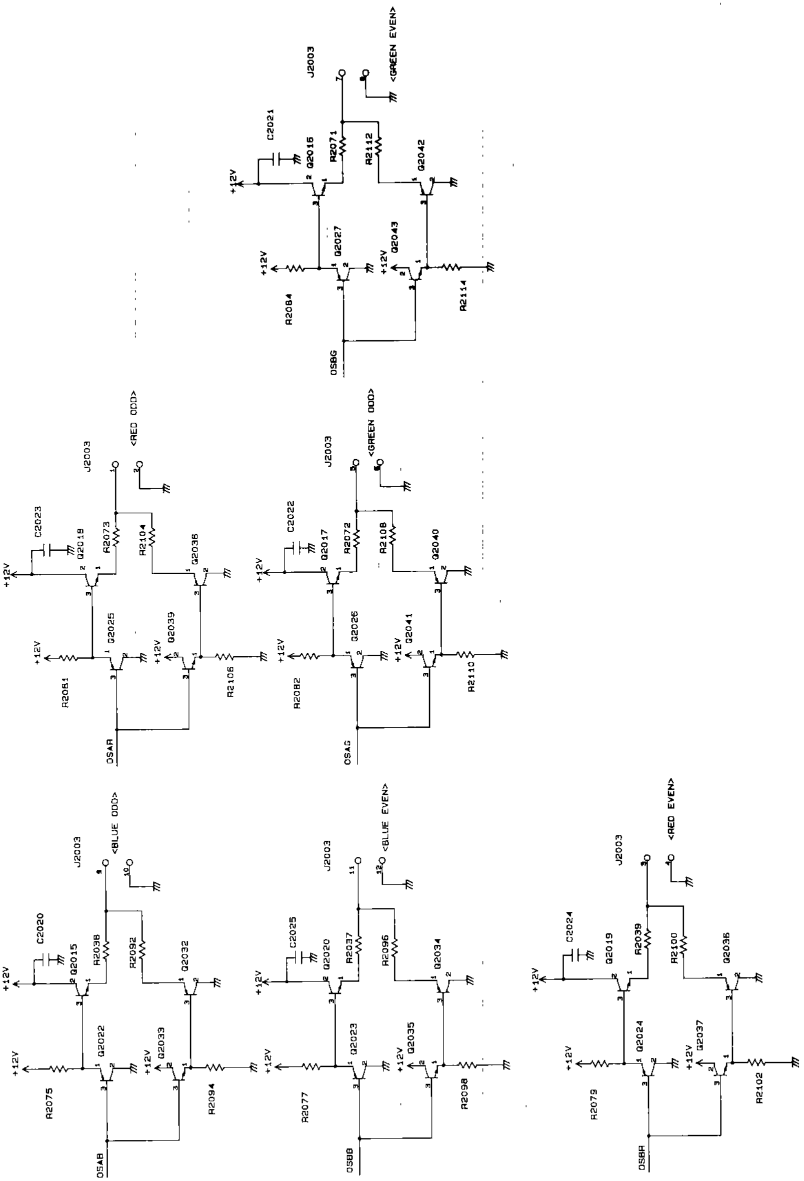

J105
J105
J105
J105
+5V
C225
R221
Q217
R222
C226
C227
R220
Q218
R224
R219
R223
Q215
Q216
R216
R218
R215
D212
R217
C223
-5R
C220
C219
+5R
C214
Q214
C213
C218
Q211
Q212
Q213
R212
R214
R211
D211
R213
+5V
C212
C216
C222
C211
C215
C221
J104
J104
J104
XT-+8V
XT--8V

J. CCD/CCD DRIVER CIRCUIT DIAGRAM

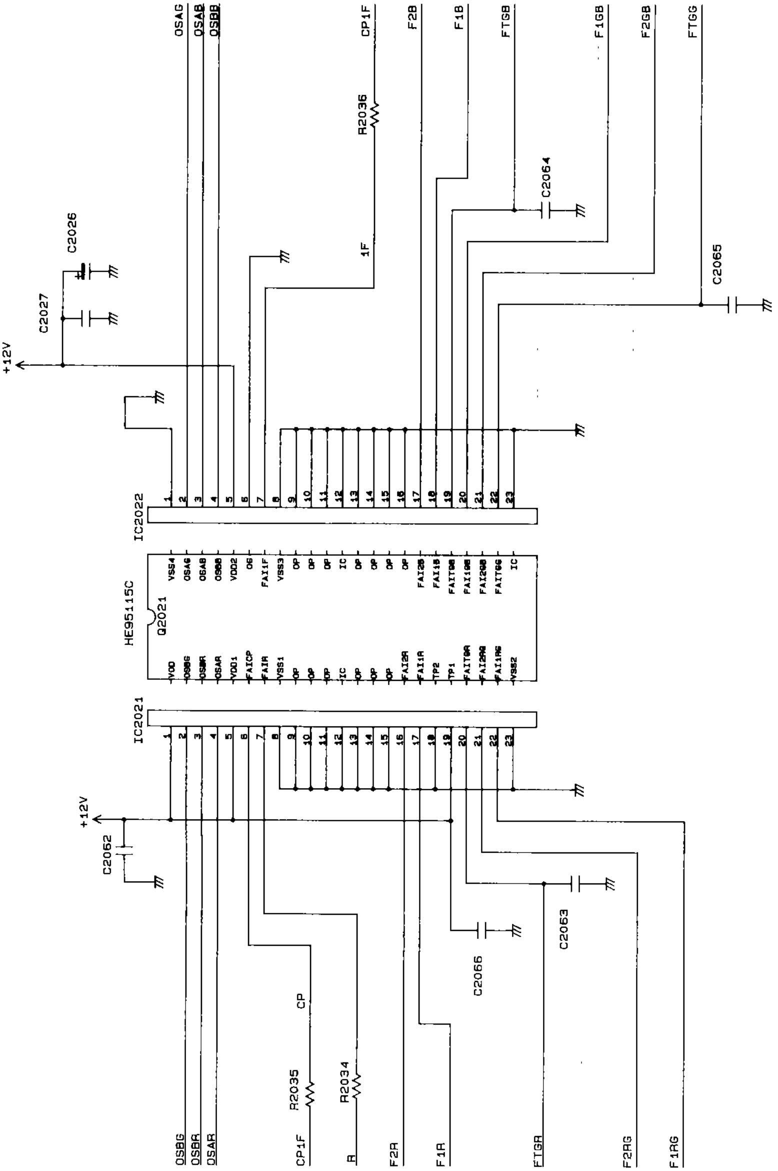
CCD/CCD driver circuit diagram (1/4)


Q2005
Q2007
Q2008
Q2010
Q2006
Q2012
Q2009
NC
OA
V+
OB
NC
IA
V-
IB
+7V
+7V RGV3
FTGB
C2003
R
CP1F
C2017
C2006
F1R
F2R
C2007
F1RG
F2RG
C2010
FTGR
FTGG
C2004
C2005
F1B
F2B
C2013
F1GB
F2GB
C2009
C2008
R*
CP*
F1*
F2*
FTG*
+5V
C2018
C2033
CP*
R*
FTG*
F1*
F2*
RA2001
RA2002
EX-CP* J2001
EX-R* J2001
EX-FTG* J2001
EX-F1* J2001
EX-F2* J2001
J2001
< from ANALOG PROCESSOR >

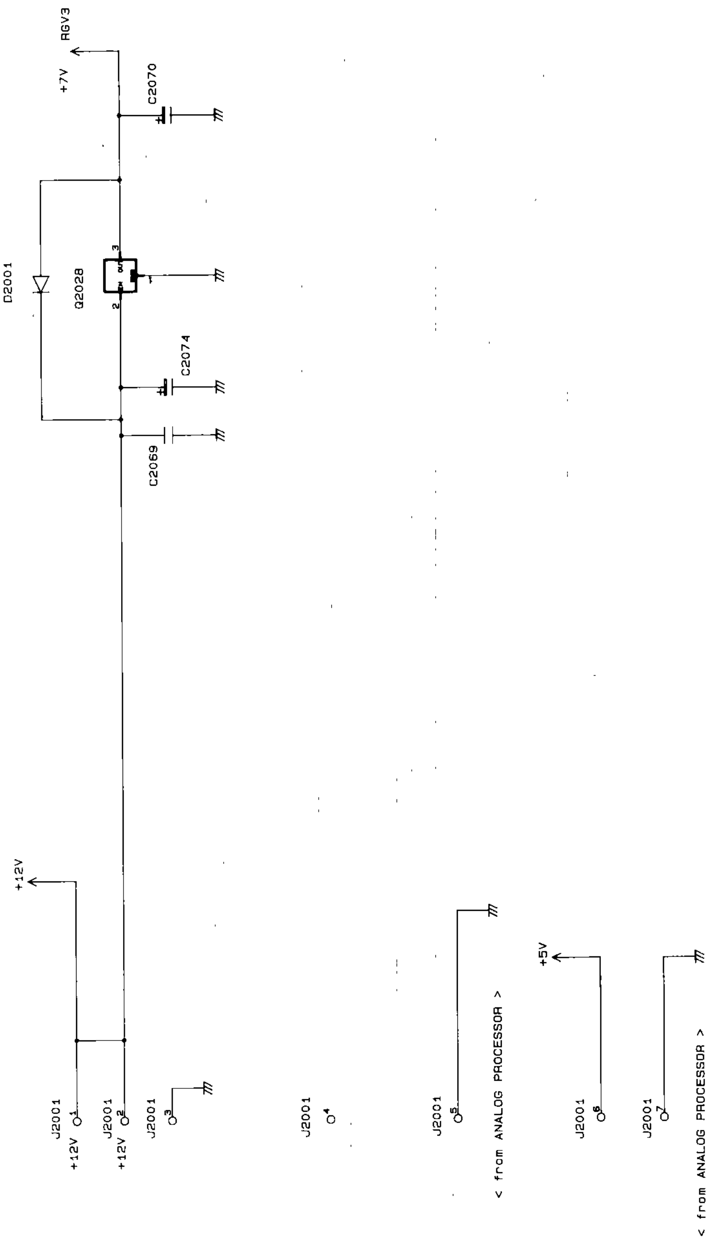
CCD/CCD driver circuit diagram (2/4)


J2003
<GREEN EVEN>
C2021
Q2016
R2071
R2112
Q2042
Q2027
Q2043
R2084
R2114
OSBG
+12V
<RED ODD>
C2023
Q2018
R2073
R2104
Q2038
Q2025
Q2039
R2081
R2106
OSAR
<GREEN ODD>
C2022
Q2017
R2072
R2108
Q2040
Q2026
Q2041
R2082
R2110
OSAG
<BLUE ODD>
C2020
Q2015
R2036
R2092
Q2032
Q2022
Q2033
R2075
R2094
OSAB
<BLUE EVEN>
C2025
Q2020
R2037
R2096
Q2034
Q2023
Q2035
R2077
R2098
OSBB
<RED EVEN>
C2024
Q2019
R2039
R2100
Q2036
Q2024
Q2037
R2079
R2102
OSBR

CCD/CCD driver circuit diagram (3/4)

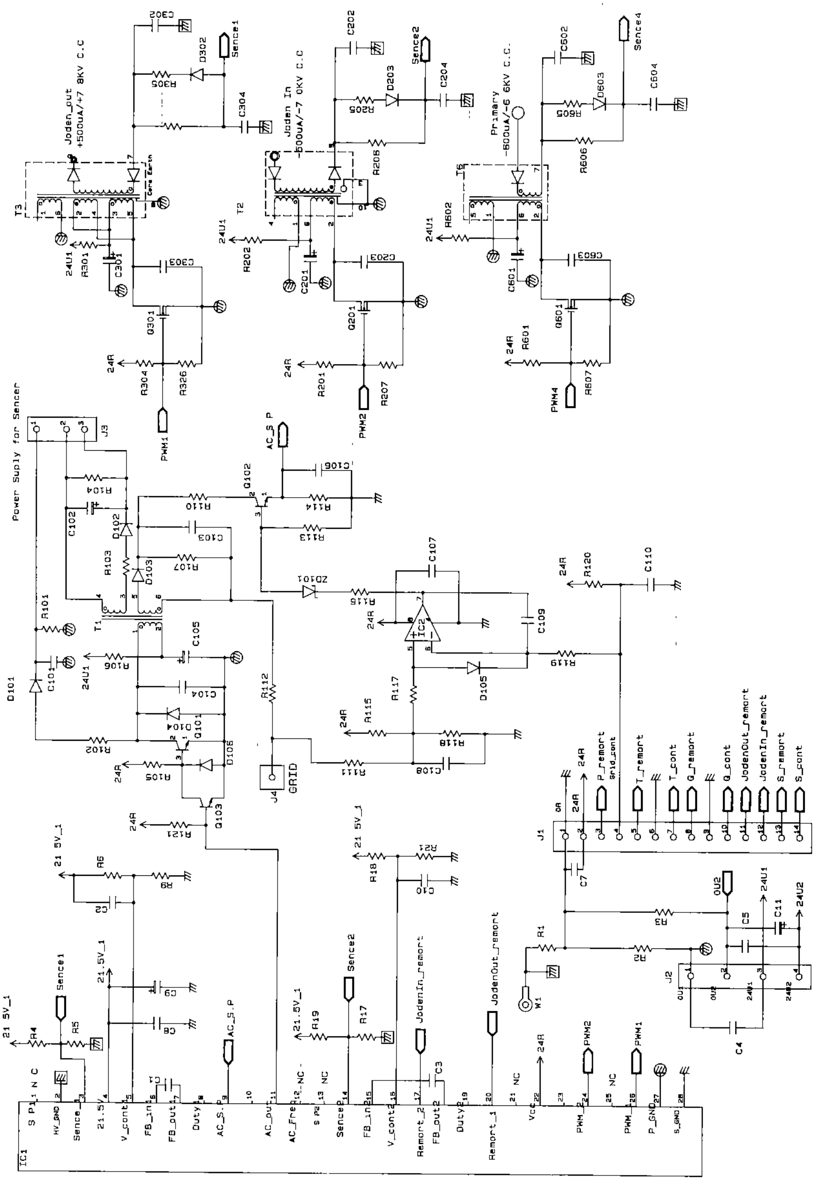

OSAG
OSAB
OSBB
CP1F
F2B
F1B
FTGB
F1GB
F2GB
FTGG
R2036
1F
C2064
C2065
C2026
C2027
+12V
IC2022
HE95115C
Q2021
IC2021
+12V
C2052
C2066
C2063
CP
R2035
R2034
OSBG
OSBR
OSAR
CP1F
R
F2R
F1R
FTGR
F2RG
F1RG

CCD/CCD driver circuit diagram (4/4)

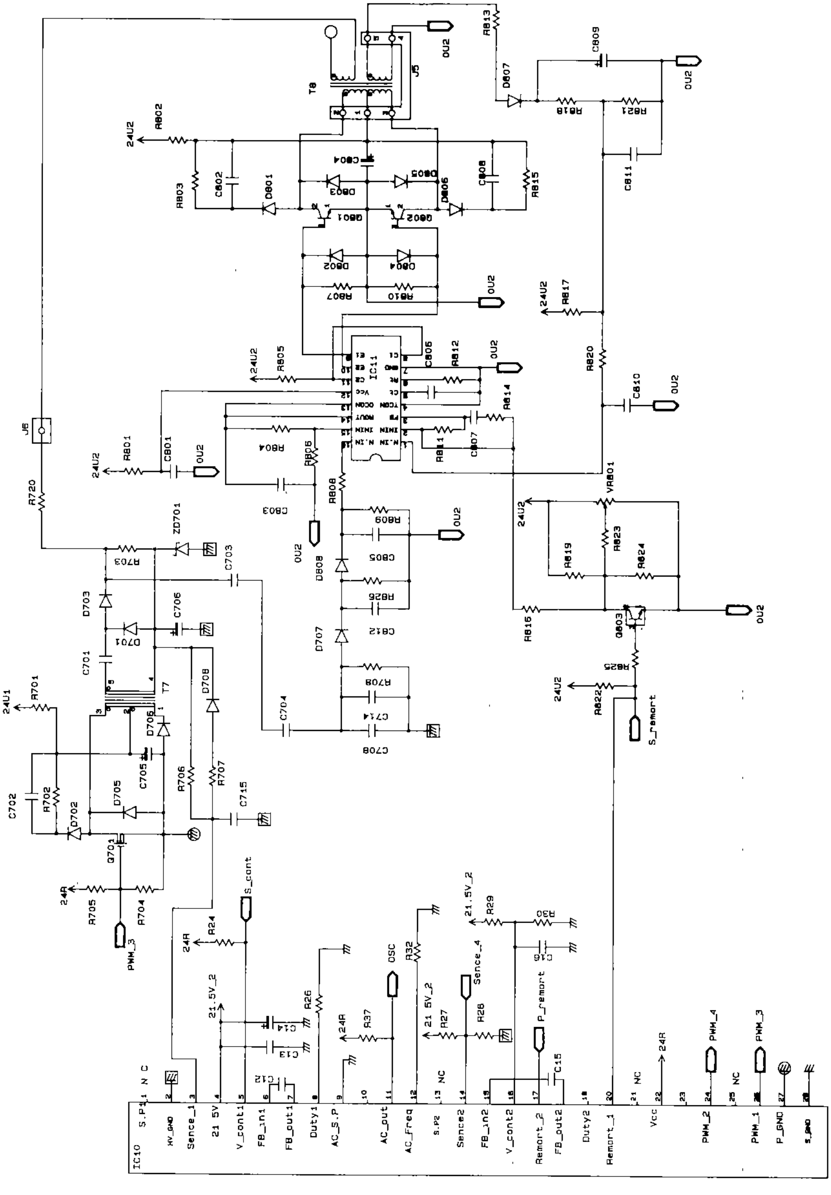

RGV3
+7V
C2070
D2001
Q2028
3
2
1
C2074
C2069
+12V
J2001 1
+12V
J2001 2
+12V
J2001 3
J2001 4
J2001 5
< from ANALOG PROCESSOR >
+5V
J2001 6
J2001 7
< from ANALOG PROCESSOR >

K. HVT CIRCUIT DIAGRAM

HVT circuit diagram (1/3)

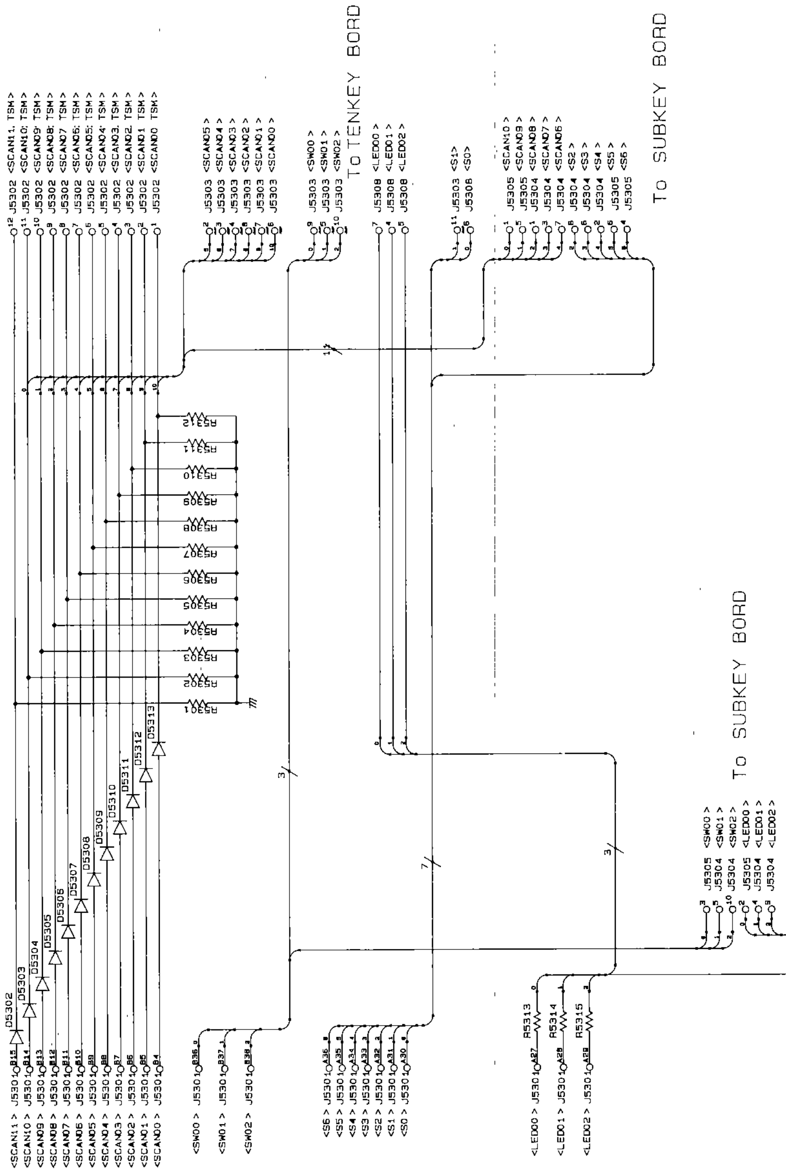

Joden_out +500uA/+7 8KV C.C
Joden In -500uA/-7 0KV C.C
Primary -600uA/-6 6KV C.C.
Sence1
Sence2
Sence4
C302
C304
C303
C301
R301
R305
R326
R304
D302
Q301
T3
Core Earth
24U1
24R
PWM1
C202
C204
C203
C201
D203
R205
R206
R202
R201
R207
Q201
T2
PWM2
C602
C604
C603
C601
D603
R605
R606
R602
R601
R607
Q601
T6
PWM4
Power Suply for Sencer
J3
AC_S_P
Q102
C106
R110
R114
R113
R104
C102
D102
C103
R103
D103
R107
ZD101
R116
C107
IC2
C109
R120
C110
R119
D105
R117
R101
T1
C105
R106
C101
D101
C104
D104
Q101
R112
R115
R118
R102
R105
D106
Q103
R121
R111
C108
J4
GRID
J1
OR
P_remort
Grid_cont
T_remort
T_cont
Q_remort
Q_cont
JodenOut_remort
JodenIn_remort
S_remort
S_cont
21 5V_1
R6
R9
C2
R21
R18
C10
C7
OU2
24U1
24U2
R3
C5
C11
R1
R2
W1
J2
C4
21.5V_1
C9
C8
R4
R5
R19
R17
JodenIn_remort
JodenOut_remort
C3
NC
IC1
S P1
HV_GND
Sence_1
21.5V
V_cont1
FB_in1
C1
FB_out1
Duty1
AC_S_P
AC_out
AC_Fre
S P2
Sence2
FB_in2
V_cont2
Remort_2
FB_out2
Duty2
Remort_1
Vcc
PWM_2
PWM_1
P_GND
S_GND

HVT circuit diagram (3/3)

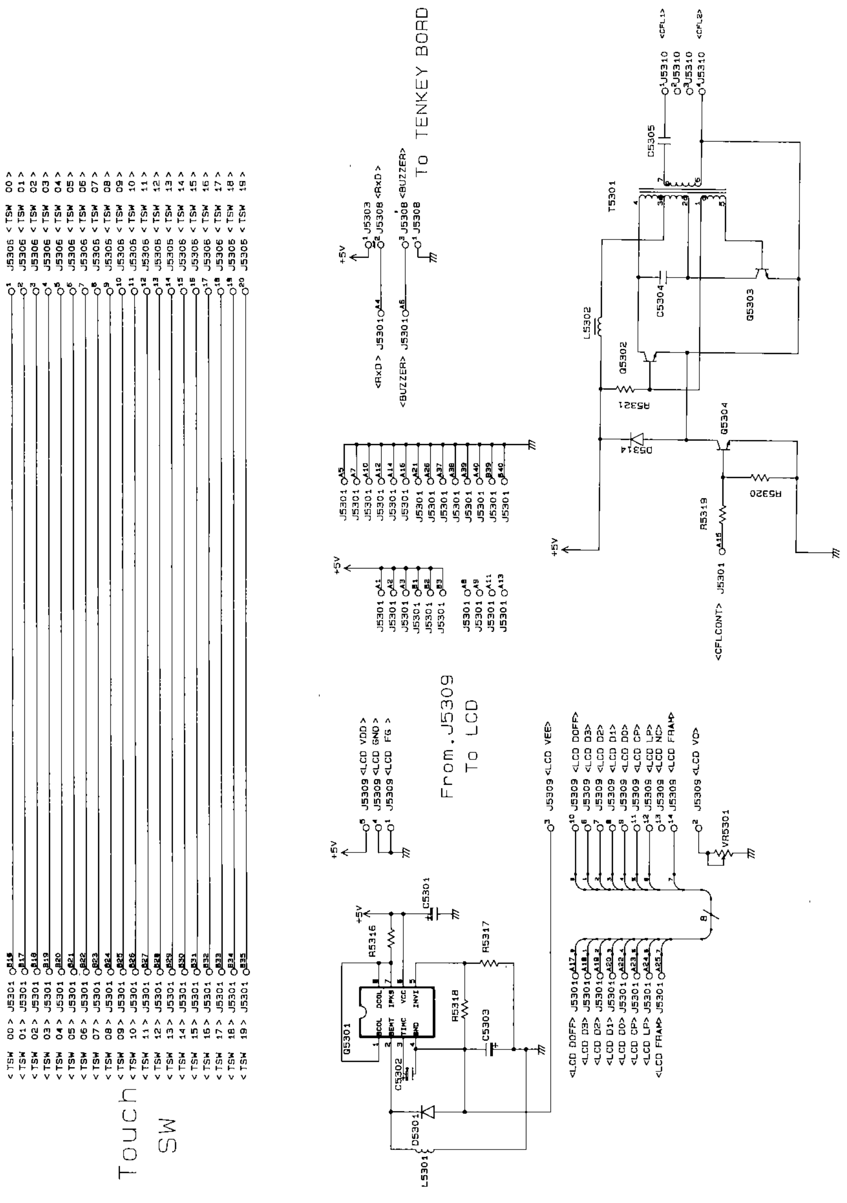

IC10
S.P1
HV_GND
Sence_1
21 5V
V_cont1
FB_in1
FB_out1
Duty1
AC_S.P
AC_out
AC_Freq
S.P2
Sence2
FB_in2
V_cont2
Remort_2
FB_out2
Duty2
Remort_1
Vcc
PWM_2
PWM_1
P_GND
S_GND
N C
NC
IC11
T8
J5
J6
T7
Q701
Q801
Q802
Q803
VR801
ZD701
OU2
24U2
24U1
24R
21.5V_2
S_cont
OSC
Sence_4
P_remort
S_remort
PWM_3
PWM_4
R720
R701
R702
R703
R704
R705
R706
R707
R708
R801
R802
R803
R804
R805
R806
R807
R808
R809
R810
R811
R812
R813
R814
R815
R816
R817
R818
R819
R820
R821
R822
R823
R824
R825
R826
R24
R26
R27
R28
R29
R30
R32
R37
C701
C702
C703
C704
C705
C706
C708
C714
C715
C801
C802
C803
C804
C805
C806
C807
C808
C809
C810
C811
C812
C12
C13
C14
C15
D701
D702
D703
D705
D706
D707
D708
D801
D802
D803
D804
D805
D806
D807
D808

L. CONTROL PANEL RELAY CIRCUIT DIAGRAM

Control panel relay circuit diagram (1/2)

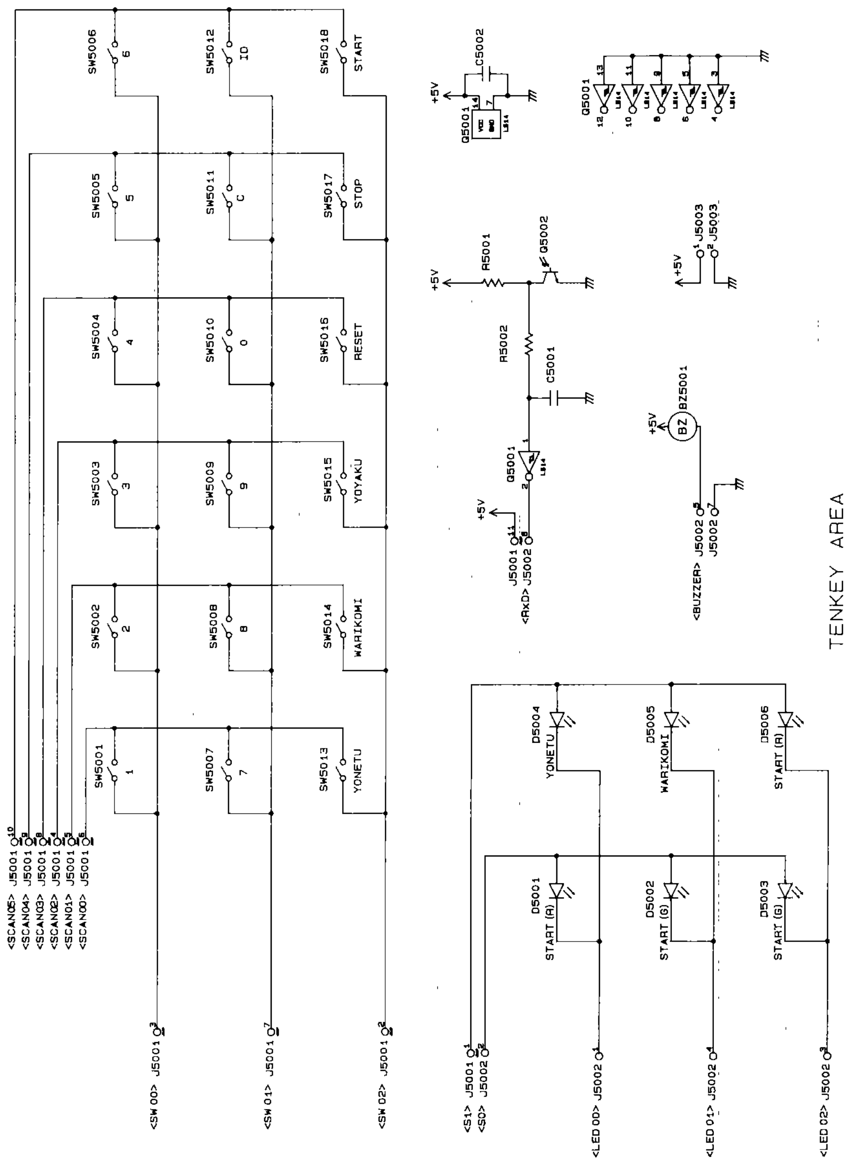

To TENKEY BORD
To SUBKEY BORD
To SUBKEY BORD
J5302 <SCAN11, TSM>
J5302 <SCAN10, TSM>
J5302 <SCAN09, TSM>
J5302 <SCAN08, TSM>
J5302 <SCAN07 TSM>
J5302 <SCAN06, TSM>
J5302 <SCAN05, TSM>
J5302 <SCAN04, TSM>
J5302 <SCAN03, TSM>
J5302 <SCAN02, TSM>
J5302 <SCAN01 TSM>
J5302 <SCAN00 TSM>
J5303 <SCAN05 >
J5303 <SCAN04 >
J5303 <SCAN03 >
J5303 <SCAN02 >
J5303 <SCAN01 >
J5303 <SCAN00 >
J5303 <SW00 >
J5303 <SW01 >
J5303 <SW02 >
J5308 <LED00 >
J5308 <LED01 >
J5308 <LED02 >
J5303 <S1>
J5308 <S0>
J5305 <SCAN10 >
J5305 <SCAN09 >
J5304 <SCAN08 >
J5304 <SCAN07 >
J5304 <SCAN06 >
J5304 <S2 >
J5304 <S3 >
J5304 <S4 >
J5305 <S5 >
J5305 <S6 >
J5305 <SW00 >
J5304 <SW01 >
J5304 <SW02 >
J5305 <LED00 >
J5304 <LED01 >
J5304 <LED02 >
R5301
R5302
R5303
R5304
R5305
R5306
R5307
R5308
R5309
R5310
R5311
R5312
R5313
R5314
R5315
D5302
D5303
D5304
D5305
D5306
D5307
D5308
D5309
D5310
D5311
D5312
D5313
11
3
7
3
<SCAN11 > J5301 B15
<SCAN10 > J5301 B14
<SCAN09 > J5301 B13
<SCAN08 > J5301 B12
<SCAN07 > J5301 B11
<SCAN06 > J5301 B10
<SCAN05 > J5301 B9
<SCAN04 > J5301 B8
<SCAN03 > J5301 B7
<SCAN02 > J5301 B6
<SCAN01 > J5301 B5
<SCAN00 > J5301 B4
<SW00 > J5301 B36
<SW01 > J5301 B37
<SW02 > J5301 B38
<S6 > J5301 A36
<S5 > J5301 A35
<S4 > J5301 A34
<S3 > J5301 A33
<S2 > J5301 A32
<S1 > J5301 A31
<S0 > J5301 A30
<LED00 > J5301 A27
<LED01 > J5301 A28
<LED02 > J5301 A29

Control panel relay circuit diagram (2/2)

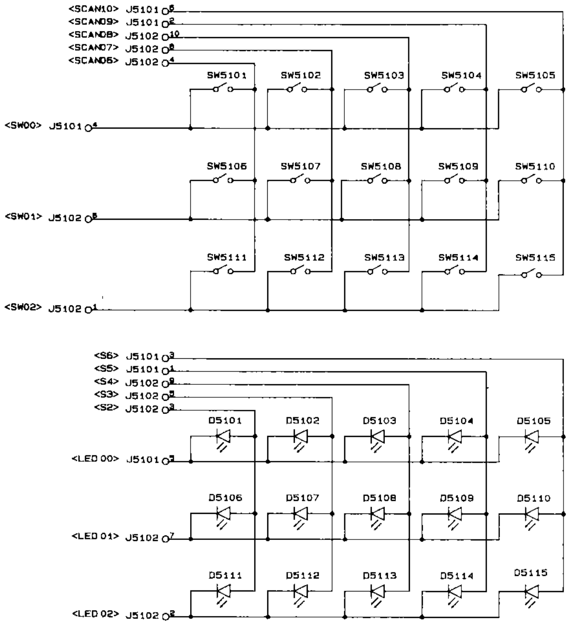

Touch SW
<TSW 00> J5301 B16
<TSW 19> J5301 B35
J5306 <TSW 00>
J5306 <TSW 19>
To TENKEY BORD
+5V
J5303
J5308 <RxD>
J5308 <BUZZER>
<RxD> J5301 A4
<BUZZER> J5301 A6
J5301
From. J5309 To LCD
J5309 <LCD VDD>
J5309 <LCD GND>
J5309 <LCD FG>
J5309 <LCD VEE>
J5309 <LCD DOFF>
J5309 <LCD D3>
J5309 <LCD D2>
J5309 <LCD D1>
J5309 <LCD D0>
J5309 <LCD CP>
J5309 <LCD LP>
J5309 <LCD NC>
J5309 <LCD FRAM>
J5309 <LCD V0>
<LCD DOFF> J5301 A17
<LCD D3> J5301 A18
<LCD D2> J5301 A19
<LCD D1> J5301 A20
<LCD D0> J5301 A22
<LCD CP> J5301 A23
<LCD LP> J5301 A24
<LCD FRAM> J5301 A25
VR5301
Q5301
DCOL
IPKS
VCC
INVI
SCOL
SEMT
TIMC
GND
R5316
R5317
R5318
C5301
C5302
C5303
D5301
L5301
T5301
C5305
C5304
L5302
Q5302
Q5303
Q5304
R5321
D5314
R5319
R5320
<CFLCONT> J5301 A15
J5310 <CFL1>
J5310 <CFL2>

M. TENKEY CIRCUIT DIAGRAM

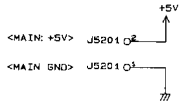
Tenkey circuit diagram (1/2)


SW5001 1
SW5002 2
SW5003 3
SW5004 4
SW5005 5
SW5006 6
SW5007 7
SW5008 8
SW5009 9
SW5010 0
SW5011 C
SW5012 ID
SW5013 YONETU
SW5014 WARIKOMI
SW5015 YOYAKU
SW5016 RESET
SW5017 STOP
SW5018 START
<SCAN05> J5001 10
<SCAN04> J5001 9
<SCAN03> J5001 8
<SCAN02> J5001 4
<SCAN01> J5001 5
<SCAN00> J5001 6
<SW 00> J5001 3
<SW 01> J5001 7
<SW 02> J5001 2
+5V
C5002
Q5001 VCC GND LS14
14
7
Q5001
13 11 9 5 3
12 10 8 6 4
LS14
R5001
Q5002
R5002
C5001
Q5001 1 2 LS14
J5001 11
<RxD> J5002 6
J5003 1
J5003 2
BZ BZ5001
<BUZZER> J5002 5
J5002 7
TENKEY AREA
D5004 YONETU
D5005 WARIKOMI
D5006 START (R)
D5001 START (R)
D5002 START (G)
D5003 START (G)
<S1> J5001 1
<S0> J5002 2
<LED 00> J5002 1
<LED 01> J5002 4
<LED 02> J5002 3

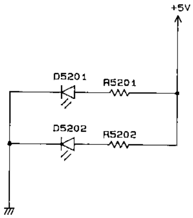
Tenkey circuit diagram (2/2)


<SCAN10> J5101 6
<SCAN09> J5101 2
<SCAN08> J5102 10
<SCAN07> J5102 8
<SCAN06> J5102 4
SW5101
SW5102
SW5103
SW5104
SW5105
<SW00> J5101 4
SW5106
SW5107
SW5108
SW5109
SW5110
<SW01> J5102 5
SW5111
SW5112
SW5113
SW5114
SW5115
<SW02> J5102 1
<S6> J5101 3
<S5> J5101 1
<S4> J5102 9
<S3> J5102 5
<S2> J5102 3
D5101
D5102
D5103
D5104
D5105
<LED 00> J5101 7
D5106
D5107
D5108
D5109
D5110
<LED 01> J5102 7
D5111
D5112
D5113
D5114
D5115
<LED 02> J5102 2

SUBKEY AREA

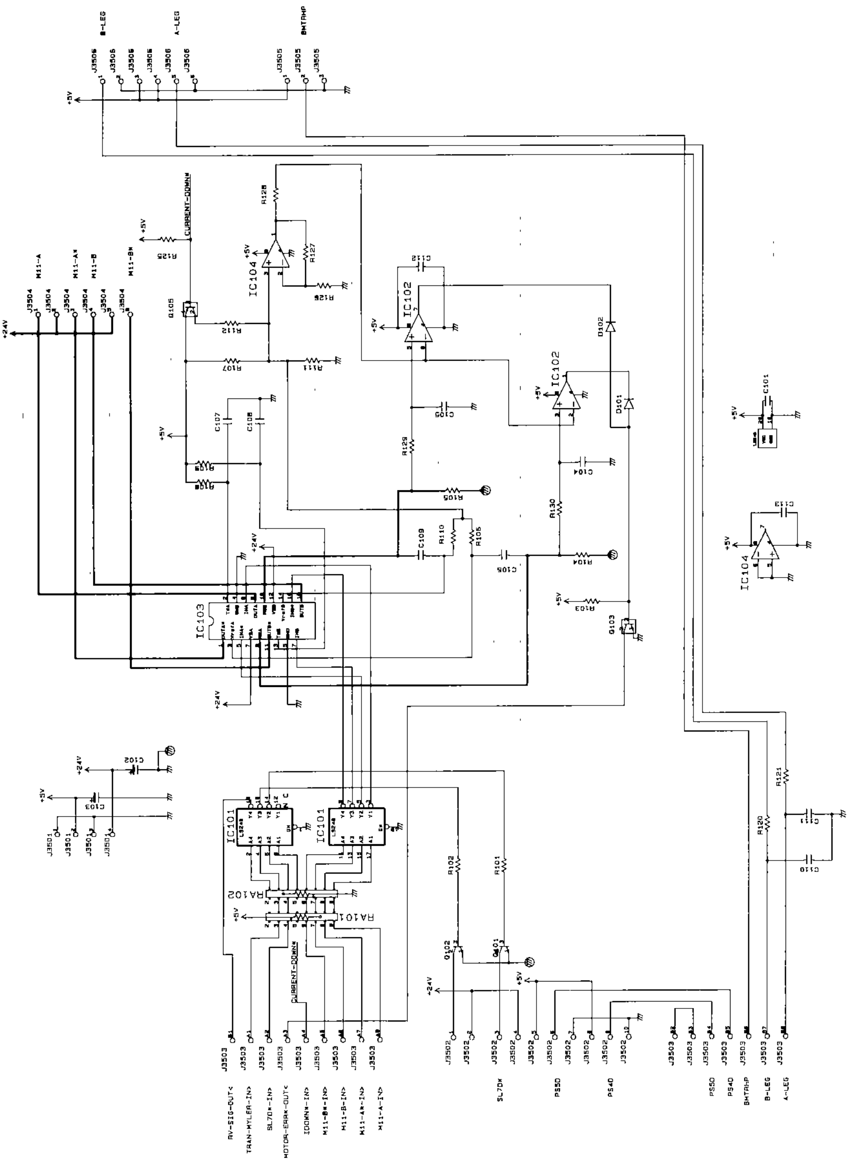

+5V
<MAIN: +5V> J5201 2
<MAIN GND> J5201 1

From Ten Key SW Board

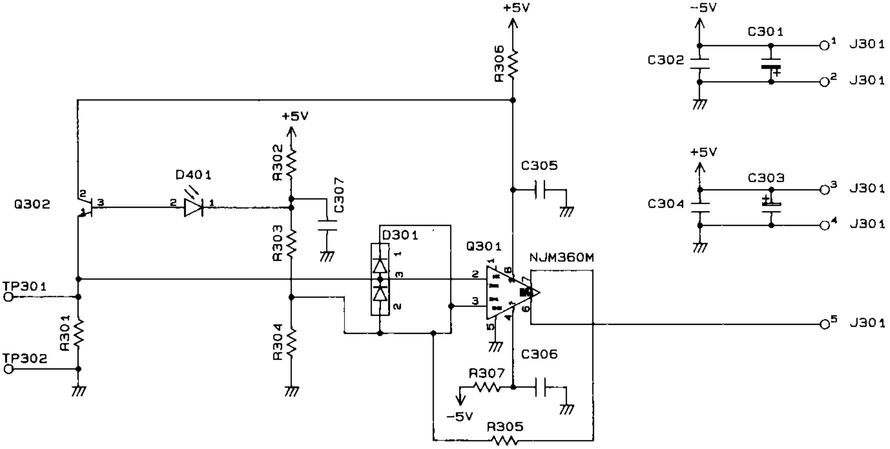

+5V
D5201
R5201
D5202
R5202

PILOT LAMP AREA

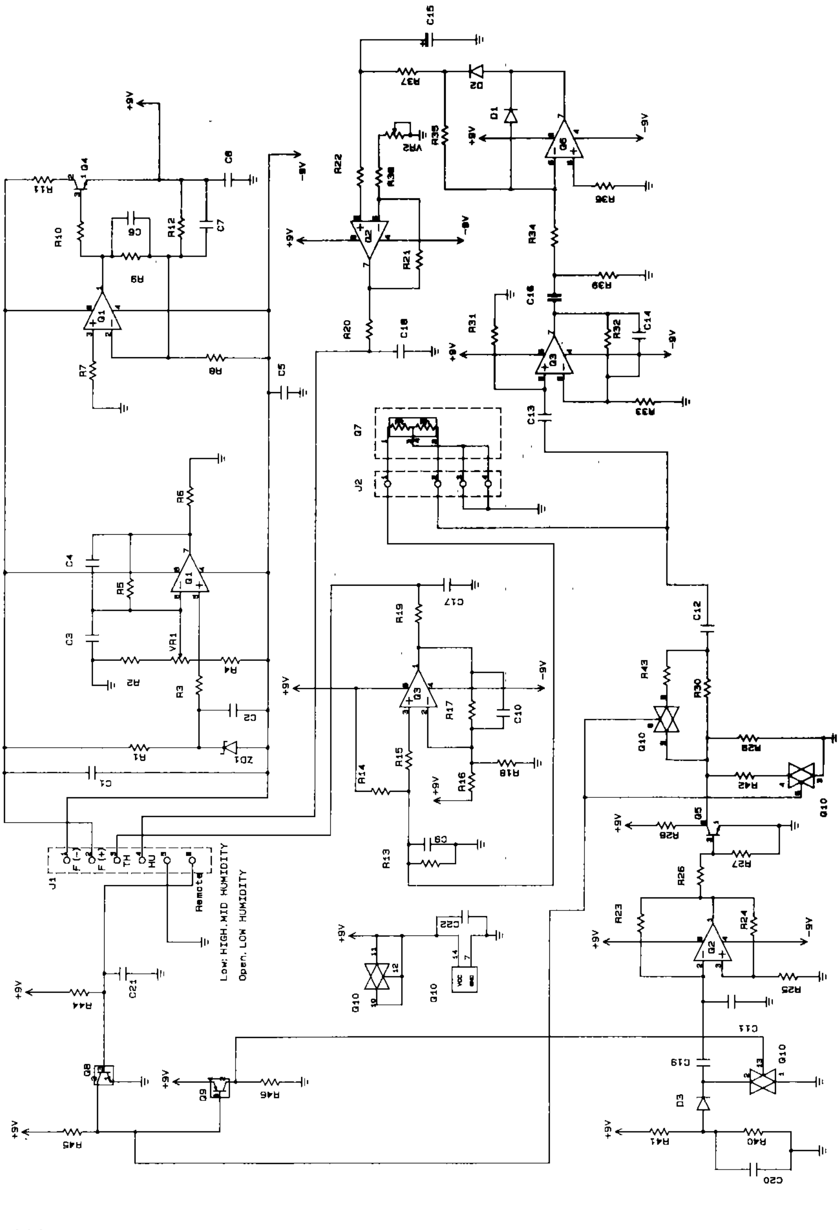
N. TRANSFER DRIVER CIRCUIT DIAGRAM


J3506
B-LEG
A-LEG
J3505
BMTRHP
+5V
CURRENT-DOWN*
R128
R125
R127
R126
IC104
M11-A
M11-A*
M11-B
M11-B*
J3504
+24V
Q105
R112
R107
R111
C112
IC102
D102
D101
C101
C107
C108
C105
R109
R108
R129
C104
R105
R130
C109
R110
R106
C106
R104
R103
Q103
IC103
C102
C103
J3501
IC101
LS240
RA102
RA101
R102
R101
Q102
Q101
R121
R120
C111
C110
C113
-24V
J3503
J3502
RV-SIG-OUT<
TRAN-MYLER-IN>
SL7D*-IN>
MOTOR-ERR-OUT<
IDOWN*-IN>
M11-B*-IN>
M11-B-IN>
M11-A*-IN>
M11-A-IN>
SL7D*
PS5D
PS4D
PS5D
PS4D
BMTRHP
B-LEG
A-LEG

O. BD CIRCUIT DIAGRAM

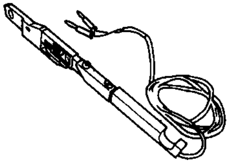
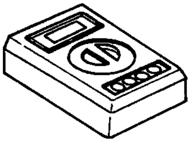
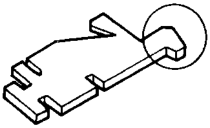
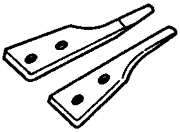
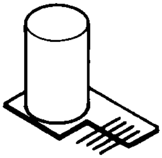

+5V
R306
-5V
C301
J301
C302
J301
+5V
R302
D401
C307
C305
+5V
C303
J301
Q302
C304
J301
R303
D301
Q301
NJM360M
TP301
J301
R301
R304
TP302
C306
R307
-5V
R305

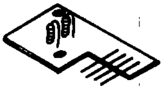
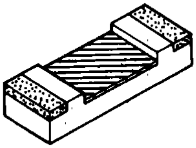
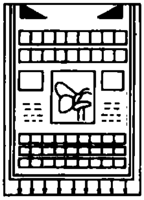
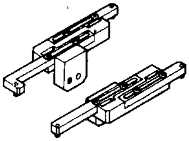
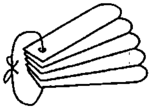
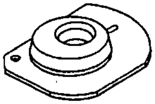
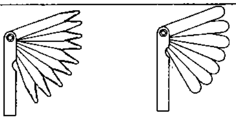
P. ENVIRONMENT MEASURING CIRCUIT DIAGRAM


J1
F(-)
F(+)
TH
HU
Remote
Low; HIGH.MID HUMIDITY
Open.LOW HUMIDITY
J2
Q7
Q1
Q2
Q3
Q4
Q5
Q6
Q8
Q9
Q10
VR1
VR2
ZD1
D1
D2
D3
+9V
-9V
VCC
GND

Q. SPECIAL TOOLS

You will need the following special tools in addition to the standard tools set to service the machine.

No.	Tool Name	Tool No.	Shape	Rank*	Remarks
1	Laser power checker	FY9-4013		A	Use it when adjusting the intensity of the laser from the laser unit; to be use in combination with a digital multimeter.
2	Digital multimeter	CK-0436		A	Use it when adjusting the intensity of the laser from the laser unit; to be use in combination with the laser power checker to adjust the intensity of the laser from the laser unit.
3	Door switch	TKN-0093	Point to use 	A	Do not remove the transfer assembly frame while the door switch is on.
4	Stop ring pliers end replacement	CK-0426		B	Use it when removing the grip stop ring; 4 to 9 mm.
5	Environment sensor checker	TKN-0456		B	Use it when checking the environment sensor.

No.	Tool Name	Tool No.	Shape	Rank	Remarks
6	Environment sensor checker	TKN-0457		B	Use it when checking the environment PCB.
7	Potential sensor checker (terminal)	TKN-0197		B	Use it when making a zero-level check on the surface potential sensor.
8	CA1 test sheet	FY9-9030-000		A	Use it when adjusting or checking images.
9	Mirror positioning tool (front, rear)	FY9-3002-000		B	Use it when adjusting the position of No. 1/No. 2 mirrors; to be used in combination with the mirror positioning tool (rear).
10	S-B gap gage	FY9-3015-000		B	Use it for adjusting the S-B gap of the developing assembly.
11	Positioning tool, photo, drum shaft	FY9-3016-000		B	Use it for adjusting the position of the shaft of the photosensitive drum.
12	Gap gauge	CK-0057-000 or CK-0061-000		B	Use it to adjust the transfer separation claw position.

*Rank

A : Must be kept by each service person.

B : Must be kept by each group of about five service persona.

C : Must be kept by each workshop.

R. SOLVENTS AND OILS LIST

No.	Item	Use	Chemical formula, mixture ratio, etc.	Source	Remarks
1.	Ethyl alcohol (Ethanol) Isopropyl alcohol (Isopropanol)	Cleaning: copyboard, glass, mirror, etc.	C_2H_5OH $(CH_3)_2CHOH$	Local	Take care in handling. All are flammable. Use in a well-ventilated area. Avoid breathing vapor.
2.	MEK	Removing toner or oil stains	CH_3-CO-C_2H_5 Methylethy ketone	Local	Do not use for cleaning the drum, plastic molded parts, or corona wires. Use in a well-ventilated area and avoid breathing vapor. Avoid contact with eyes or with skin.
3.	Hear-resistant grease	Lubricating the drive mechanisms; e.g., fixing drive gear, fixing ass'y, etc.		CANON	Tool No.: CK-0427 (500 g/can; equivalent grease may be used if able to withstand 200°C for extended periods of time.)
4.	Lubricating oil	Lubrication points	ISO VG 68 oil ESSO Feibs K68 MOBIL Vactra oil No. 2 SHELL Tonna oil T68	Local	Equivalent oil can be used. Tool No.: CK-0451 (100 cc)
5.	Lubricant		Mineral oil (paraffin family)	Local	• Uniway 220 (Nihon Sekiyu) • Tool No.: CK-0524 (100 cc) • Alternative Cosmo Dynaway 220 (Cosmo Oil)
6.	Flannel cotton cloth	Cleaning		Local	It should be soft enough for cleaning the drum, and it should not produce lint.
7.	Lint-free paper	Cleaning	Kimberly-Clark Kim wipes 6020-23 × 40 cm, or 6021-13 × 21 cm	Local	It should be soft enough for cleaning the drum, and it should not produce lint.

Note:
Solvents listed are not toxic, but they may produce minor, temporary effects if breathed in a high concentration, or if let to remain on the skin for a period of time. Any effects are temporary, but exercise reasonable caution nevertheless.